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Discovering New Selves:  
Service-Learning and the Intellectual Development  
of College Students

A Dissertation

Submitted to the Graduate Faculty of the  
University of New Orleans  
in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy  
in  
The Department of Educational Leadership, Counseling, and Foundations

by

Charlotte J. Maheu

B.A., University of New Orleans, 1993  
M.A., University of New Orleans, 1995

May, 2009

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## **ABSTRACT**

The purpose of this study was to explore college students' intellectual development through their service-learning experience. This study also took into consideration the characteristics of student groups and the way in which they transformed intellectually through their service-learning experience. To examine these questions, twelve upper-division college students who had completed a service-learning course were interviewed, in order to capture the dynamics of their service-learning experiences, their perceptions of their intellectual development, and their values and priorities as college students in detail. From the interviews, five major themes related to college students' intellectual development emerged. Three of the themes focused on the interpersonal capacities and complexities of intellectual development, and two were related to the complexity and challenges of unstructured problems related to service-learning and college students' intellectual growth. In addition, by analyzing the themes and the characteristics of student groups together, I coined new terms to capture the intellectual transformation of modern-day college students who participate in service-learning. The findings of this study will add to the understanding of college students' intellectual development through service-learning, as well as how students transformed through the experience, and provide opportunities for future research to investigate specific groups of college students in this and other collegiate settings.

**Keywords:** College students; service-learning; intellectual development

# **CHAPTER I**

## **INTRODUCTION**

Service-learning incorporated in higher education has provided college students with opportunities to relate theory to practice in order to expand their understanding of concepts addressed in the classroom and to apply tangible social matters to an academic discipline. Through the practical experience associated with service-learning coursework, students are simultaneously educated about real issues and problems in society (Eyler & Giles, 1999; Furco & Billig, 2002; Mabry, 1998). Throughout its history, service-learning has shifted from faculty-focused projects that provided support to the community to community-based programs that provided practical experience to college students (Bickford & Reynolds, 2002; Stanton, Giles, & Cruz, 1999). More recently, faculty and university administrators have attempted to establish a more equitable and balanced relationship among the faculty, college students, and the community. This form of education enables students to expand their understanding of issues and open their eyes and minds to current social, political, and economic matters in the community. It also allows students to obtain new and varying perspectives and ideas. Though it is a relatively new pedagogical method recognized by higher education, service-learning has rapidly become an important part of the university curriculum. The impact on students' understanding of course material in relation to practical issues, as well the esteem in which it is held by some faculty, has slowly elevated its status in the academy.

Because of the expectations placed on colleges and universities and the emphasis on accountability, researchers tend to concentrate on higher education, the college students who participate in service-learning, and its influence on college students (Eyler, Giles, & Braxton, 1997; Eyler & Giles, 1999; Eyler, 2000; Mabry, 1998; Steinke & Buresh, 2002). More

specifically, many studies related to service-learning direct their attention to college students' personal or individual development (Kuh, 1995; Rhoads, 1997), their changing attitudes and multicultural perspectives (Billig & Furco, 2002), or their degree of civic engagement (Battistoni, 1997; Rhoads, 1998). Recently, researchers have shifted their focus to examining students as citizens of the world or agents of social change through their involvement with service-learning (Cunningham & Kingma-Kiefhofer, 2004; Lewis, 2004). While relevant to the understanding service-learning's role, this type of research does not attend to the importance and nuances of students' intellectual development and its relationship to their service-learning experience. Examining this question is necessary in order to establish service-learning's credibility, durability, and potential value in the university setting (Zlotkowski, 1995).

Since the mission of virtually all colleges and universities includes providing students with an intellectual setting and academic challenges, we must expand upon research that is limited to the academic experience of college students who participate in service-learning. Through service-learning, college students not only have the opportunity to provide service to the community and obtain practical experience, they also engage with an experience has become increasingly connected to their coursework. As a result, service, in relation to the academic experience, will likely become even more prominent, thereby establishing greater credibility for service-learning within the academy. Yet, despite the increasing interest and attention placed on service-learning, it is still not considered a significant aspect of the college curriculum, due in part to the limited amount of research that focuses on the relationship among service, student learning, and academic departments (Eyler & Giles, 1999; Kendrick, 1996; Markus, Howard, & King, 1993; Steinke & Buresh, 2002). Additional and more detailed research on college students' service-learning experience and their cognitive or intellectual development would

provide data and information that would be valuable for fostering practice and research in the field. According to Steinke and Buresh (2002), “the outcome measures of service-learning that faculty will find most convincing will assess the cognitive or intellectual outcomes of their students specific to course content” (p. 5). With further examination of college students’ perceptions of their course related service-learning experience in relation to their individual characteristics, researchers will be better able to examine and illustrate students’ cognitive and intellectual development.

To understand college students’ service-learning experience more completely, this dissertation examined their intellectual development and defined intellectual development based partially on the research of Eyler and Giles (1999). Eyler and Giles examined service-learning and students’ learning, cognitive development, and problem-solving abilities based on the research of Perry, King and Kitchener, and Cindy Lynch, a researcher who also examines critical thinking, problem solving, and reflective judgment. Due to the depth of their research, their definition of college students’ intellectual development is the most compelling as it relates to service-learning. It incorporated learning and application of material, critical thinking and problem solving, and perspective transformation. As a way of contributing to add to the current research on service-learning, this study explored the experience of college students who participated in course-related service-learning programs and examined their intellectual development, as defined above. It also considered college students’ individual characteristics, as defined by Horowitz (1987) in her history of college culture, in order to provide a framework for understanding the nuances of their intellectual development in relation to their service-learning experience.

### Statement of Problem

Historically, colleges and universities have used traditional teaching methods, including lecture, discussion, assignment of papers, and tests. Students are then evaluated on the material they have learned to determine if they should move forward in their curriculum and develop that knowledge in subsequent courses. However, the use of these conventional pedagogical methods is not always sufficient to foster students' intellectual development, as explained by L. Lee Knefelkamp in his analysis of the characteristics of Perry's positions in relation to experiential learning. Service-learning addresses this shortcoming by enhancing college students' intellectual development, and in view of the fact that students experience different processes in their thinking because of the opportunities that service-learning provides. It allows them to apply concepts to a real setting; to place themselves in an unfamiliar setting and to participate in it; to process the experience with other students, faculty, and community members; to employ research methods throughout the service-learning course; and to communicate the service-learning experience to others through various pedagogical methods.

Service-learning research also explains the development of college students' intellectual capacities. Steinke and Buresh (2002) found that students had a more thorough understanding of course material and more fully understand complex problems after their service-learning course. Bringle and Hatcher (1996) argued that "faculty who use service-learning discover that it...enhances performance on traditional measures of learning,...teaches new problem solving skills (p. 222). Likewise, Battistoni (1997) asserted in his study on citizenship and service-learning that "the student's ability to analyze critically is enhanced by confronting ideas and theories with the actual realities in the world..." as provided by the service-learning experience (p. 152). Parker-Gwin and Mabry (1998) concluded, in their study of service-learning as

pedagogy and civic engagement, “Ideally, service-learning has the potential to move students from identifying concepts, rote memorization, and summaries to higher-order processes of analysis, synthesis, and critique” (p. 288). Nonetheless, despite such evidence of the relationship between service-learning and students’ intellectual development, much research conducted on service-learning and students’ intellectual or cognitive development focuses on other topics—such as faculty involvement, civic engagement, and citizenship—that are largely external to college students’ intellectual growth.

While including other aspects of college students’ intellectual development through their service-learning experiences, most research that addresses service-learning tends to focus on non-academic studies, including external course-based grades and course expectations, or intellectual development, including the internal, individualized development of college students (Eyler & Giles, 1999). Eyler and Giles have conducted significant research on service-learning that includes aspects of students’ intellectual growth and academic experience, and they address the weaknesses of the field and its research:

[The] lack of connectedness [in higher education] resulted in the compartmentalization of knowledge by discipline, preventing students from experiencing the relationships among various modes of knowledge...these programs have flourished but have not become well connected to the academic core of most institutions. (p. 13)

Such findings suggest that, without a significant connection to universities’ academic departments and disciplines, service-learning will remain unable to establish strong roots in order to grow and develop in postsecondary education. While the more recent exploration of civic development in college students is important to the study of service-learning, the examination of service-learning and college students’ intellectual development has remained incomplete;



therefore, we must examine students' intellectual development in relation to service-learning more closely.

Furthermore, the research that has been conducted on service-learning and students' intellectual or cognitive development has failed to consider students' perspectives. Doing so would highlight individual intellectual development in relation to the service-learning experience. Moreover, much of the research does not fully capture the relationship between the service and students' intellectual development. According to Eyler and Giles (2002), "Evidence for academic or cognitive impact is less persuasive" (p. 147) than other research related to service-learning because "data gathered has been weak" (p. 147). While a number of surveys have been used to examine the links between service-learning and students' academic outcomes, student learning, and academic performance, they fail to explore students' ability to apply those outcomes or to reflect on them, behaviors that illustrate intellectual development. As a means to supplement the research and study students' understanding of course material, service experience, and their critical thinking skills more closely, Eyler and Giles argued that observations and interviews should be conducted to obtain a more complete understanding. Their study illustrated the significance of qualitative research in the context of students' examination of their own intellectual growth through and after the service-learning experience. Through qualitative research methods, data can be obtained that can foster a thoughtful and thorough analysis of college students' service-learning experience and intellectual development.

In addition to the weaknesses of research conducted on students' intellectual development, there has been an increasing concern for the college graduate who is inadequately prepared for the "real world." Due to a variety of parental, societal, and educational factors, college graduates may lack the skills required for cognitive thought, showing initiative,

communication (verbal and written), original thinking, complete comprehension, and problem solving (Levine, 2005). These characteristics, as aspects of intellectual development, are significant, not only for the graduates, but also for the community of which they are becoming active members, the reputation of the educational system that granted their degrees, and higher education more broadly. The perception of inadequate preparation should be addressed in a way that provides college students with opportunities to obtain skills through both academic and experiential learning methods and show to the community evidence of the need for changes within higher education. Moreover, colleges and universities can also demonstrate to society that college students are not only significant contributors to the community in their capacity as students, but also as graduates.

To obtain a thorough understanding of college students' intellectual development in relation to service-learning, it is important fully to examine their service-learning experience and the characteristics they bring to the experience. By focusing on the student and the service-learning experience, researchers and colleges and universities will be better able to comprehend how service-learning fosters students' intellectual development, independently of their other forms of development. In addition, attention to the intellectual development of different groups of students and their service-learning experience will provide a more thorough understanding of the complexities of students' intellectual growth and the role that service-learning plays in it. Concentrated exploration of college students' service-learning experience and their intellectual development will thus provide researchers and practitioners with valuable information, furnishing the area of service-learning with credibility as a viable academic endeavor and investment for colleges and universities.

### Purpose of the Study

This dissertation explored the relationship between the service-learning component of college students' academic coursework and their intellectual development. It focused, in particular, on the way in which students study, examine, and reflect on their thought processes, that is, on their analytical and critical thinking, application and assessment of course material, and articulation of knowledge gained from the service-learning experience. This focus provided more information to service-learning programs about students' intellectual development, as defined by Perry (1999) and Chickering and Reisser (1993), and the relationship between service-learning and intellectual development, as examined by Eyler and Giles (1999). To obtain a more thorough understanding of student perceptions of their experiences and intellectual development through service-learning, it discussed intellectual development and cognitive development and Horowitz's (1987) model of the insider, outsider, and rebel. The incorporation of Horowitz's model shed light on how various groups of college students develop intellectually through their service-learning experience.

### Intellectual and Cognitive Development Defined

Clearly defining the terms "intellectual" and "cognitive" is critical in relation to service-learning for a number of reasons. First, researchers must be able to understand the goals and objectives of their research more accurately and be better able to analyze their data. Second, faculty members will be able more effectively to recognize the way in which college students develop and therefore to incorporate service-learning in their courses to effect growth in students, whether this growth be cognitive or intellectual. Third, it will enable service-learning directors, faculty and administrative committees, and related student-affairs professionals to develop and implement service-learning support provided to students and faculty; to identify

how students develop intellectually or cognitively; and to provide the resources to faculty and students to facilitate their development. Distinguishing the terms “intellectual” and “cognitive” in relation to college students’ development through their service-learning experience is essential, because researchers and practitioners can thereby fully examine and articulate the different types of development that students experience. This understanding in turn enables researchers and practitioners to define the influence of service-learning on intellectual and cognitive development more clearly.

Although distinction between the terms is important, it is rarely discussed in the literature. Some research on students’ intellectual development does not clearly delineate between the terms “intellectual” and “cognitive” (Knefelkamp, 1979) or between “cognitive” and “thinking” (Osborne, Hammerich, & Hensley, 1998). According to Barrow (1986), cognitive processes include “to think, analyze, plan, decide, intuit, interpret, expect, imagine, and remember” (p.3). Barrow further explained the significance of studying cognitive development of college students: “...their [students’] developmental stage – in conflux with an environment stressing intellectual curiosity – disposes them to exercise their ‘cognitive muscles’ in reexamining long-held beliefs” (p. 32). Here, and based on his definition of cognition, Barrow implied that “intellect” is an aspect or part of cognition rather than synonymous with it. To understand college students’ service-learning experience more fully, this research will examine their intellectual development and define intellectual development based on the research of Eyler and Giles (1999). Elements of their study employed here include: their definition of the intellectual goals of higher education, critical thinking and problem solving, perspective transformation, and learning and application of material. College students who experience one

or more of these components through their service-learning experience will provide important evidence for how they develop intellectually.

In order to contribute to current research on service-learning, this study explored the experience of college students who participate in course-related service-learning programs and examine their intellectual development in relation to their individual characteristics. It also used specific terms to define and analyze students' intellectual development.

### Horowitz's Model – Brief Overview

Horowitz's (1987) historical framework of three groups of college students illustrated the way in which these types of students have been instrumental in the university setting from the 18<sup>th</sup> century until the contemporary period. These groups—comprised of the insider, the outsider, and the rebel—provide a valuable historical framework for the experience of college students and informs current studies of college student development. Understanding these groups enables researchers and practitioners to have a more complex understanding of the way in which college students develop personally, socially, politically, and intellectually. As is shown by Horowitz, the insider, for instance, prioritizes the acceptance of his or her peers and focuses on the social aspects of college life, whereas the outsider seeks the attention of his or her professors and places greater value on the academic advantages of the university. The rebel, the third type of student Horowitz described, challenges the insider's way of thinking and questions the system and structure of the university, from its policies and practices to the curriculum. This typology of students gives depth and richness to the description of college students and the way in which they think, respond, and behave in various environments. By understanding students' external characteristics and internal thinking patterns through Horowitz's descriptions, this dissertation more thoroughly and explicitly analyzed how these types of students develop intellectually. One

can then take this analysis and put it in the context of students' service-learning experience to examine their intellectual development more closely.

### Research Questions

The primary research question for this study was:

- How do college students develop intellectually through service-learning?

The subquestions for this study were:

- How does service-learning enhance college students' understanding of their intellectual development?
- How do college students articulate their understanding of intellectual development?
- How do college students perceive themselves as having developed intellectually, including application of material, development of critical thinking and problem solving, and changes in their perspective?
- How have college students across Horowitz's categories been transformed intellectually through their service-learning experiences?

### Significance of Study

Studying college students' intellectual development in connection to their service-learning experience is significant to the field of higher education for a number of reasons. First, according to Eyler and Giles (1999), as stated in the section, Statement of Problem, the research on service-learning is rarely correlated comprehensively with disciplinary knowledge or the details of students' intellectual development. Exploring students' intellectual development more intricately enabled me to examine further what students are learning and processing. Therefore, the discussion of students' intellectual development is more effectively presented in the context

of students' characteristics and their corresponding value systems, and so this research was based on Horowitz's (1987) model of college students. Through the exploration of students' intellectual development and their characteristics in connection to their service-learning experience, this study provided much-needed evidence of this relationship.

Second, because students' intellectual development is connected to the academic curriculum, this research is of more value and interest to faculty and administrators because of the evident connection to the educational mission of the institution. Students' intellect and their development as thinking individuals, with skills based on analysis, criticism, writing, application and assessment, for this purpose, were examined in detail. Also, service-learning's connection to disciplinary knowledge provided it with a strong foundation of credibility and relevance to faculty and administrators. Faculty's incorporation of service-learning in their coursework provides an opportunity for experiential learning and for students to develop research-based relationships with them, thereby facilitating students' intellectual growth. With this attention to students' intellectual training, administrators are more likely to establish and implement policies that support service-learning and create a more unified and cohesive service-learning structure on college campuses. This research is significant because it provides evidence for the links between service-learning and students' intellectual development. It also contributes to the research on service-learning in the field of higher education, upon which faculty and administrators rely when making decisions on academic policy.

Third, this type of research is also significant to the university by maintaining its credibility during an uncertain time. The research will enable universities to challenge what Zumeta (2001) refers to as the "cultural critiques" of higher education. Zumeta wrote, "In the last decade or so, we have seen an unusual number and intensity of published critiques of the

fundamental values and practices of modern higher education. Critics, including some insiders, have excoriated universities for setting weak academic standards...for neglecting undergraduates in favor of some esoteric research....” (p. 159). Being subjected to the scrutiny of those in the political sector, the community, and the university, the findings of this kind of research could be a key component in illustrating the value, benefits, and significance of the role of modern colleges and universities as educational institutions that successfully prepare students for the next phase in their life. Moore (1994), in his article on learning through service, wrote, “Community service, when balanced with other aspects of a student’s college experience, expands the role of education as public trust” (p. 55). Community and academic trust is necessary for higher education to survive and flourish. Trust can be developed through on-going service relationships in the community and research efforts shared with the community and within various academic disciplines.

Fourth, because colleges and universities are often challenged with respect to the students they produce, including their frequent lack of knowledge and lack of experience, it is important to examine the ways in which students develop intellectually, as they participate in increasingly common service-learning experiences. A better understanding of the way in which students develop intellectually enables colleges and universities to be more informed about their role in educating students and to be better equipped to expand academic programs as they relate to service-learning and produce well-rounded and well-prepared graduates. This study, thus, not only provided additional information about students’ service-learning experience, it benefited students by providing greater insight into their practical experience and the skills they acquired by working with other students, faculty, and members of the community. The examination of students’ independent work through their reflection, analysis, and assessment of their experience



also provided them with research-based experience to apply to a variety of academic and professional settings. With additional information, faculty, administrators, service-learning directors and committees, and student affairs professionals can implement service-learning courses and programs that would contribute positively and effectively to college students' intellectual experience.

### Overview of Methodology

This study is qualitative in nature, aiming to remedy the relative lack of research on service-learning's role in students' intellectual development. Students' descriptions of their service-learning experience provided rich data for understanding their intellectual development. Through the use of interviews and document analysis, the researcher gained an understanding of the college student service-learning experience and more insight into an area of higher education that still needs exploration and examination. Accordingly, twelve students who met the following criteria were interviewed: 1) they were upper-division students (junior or senior); and 2) they completed an upper-level academic course with a service-learning component at a four-year, private institution.

This study used the basic interpretive qualitative study, which, as defined by Merriam (1998), "seeks to discover and understand a phenomenon, a process, the perspectives and worldviews of the people involved" (p. 6). By using the basic interpretive qualitative design, the study explored the ways in which students view the academic material in class and their understanding of material from different or additional perspectives through their service-learning experience. In addition, data were collected through audio-taped interviews, and the interviews

were transcribed verbatim.<sup>1</sup> Notes were taken during and after the interviews for details about the students, their service-learning experiences, and their perceptions of their intellectual development.

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<sup>1</sup> One of the interviews was not audio-taped due to technical issues. However, as stated in Chapter 3, detailed notes were taken during and after each interview, including this one. In the analysis of this interview, the themes that emerged supported and were consistent with the themes that had emerged from the eleven audio-taped interviews with students. Also, after the interview, I verified with the student the information she provided and the quotations she gave me to ensure validity.

### Definition of Terms

*Service-Learning* is defined as the service a college student performs, which is linked to an academic course's concepts, theories, material, discussion, and requirements.

*Intellectual Development* is defined as growth or progress through critical thinking, perspective transformation, application of subject matter and experience, openness to new ideas, and increased and improved communication skills (Eyler & Giles, 1999).

*Intellectual Goals of Higher Education* include learning and application of material, critical thinking and problem solving, and perspective transformation (Eyler & Giles, 1999).

*Cognitive Development* is broadly defined, according to Barrow (1986) as "to think, analyze, plan, decide, intuit, interpret, expect, imagine, and remember" (p. 3) and is inclusive of the definition of intellectual development.

*Academic Department* is defined as a university department comprised of faculty of a related discipline and that offers courses for credit in that discipline.

*Insiders* – According to Horowitz (1987), an insider is a college student who identifies strongly with other college students, subscribes to the traditional student affairs programs the college or university offers (student government, Greek affairs, etc.), and perceives faculty and academics as a necessary, yet peripheral part of their college experience.

*Outsiders* – According to Horowitz (1987), an outsider is a college student who identifies strongly with faculty, and the college experience is closely linked with the academic curriculum and completing the degree.

*Rebels* – According to Horowitz (1987), a rebel is a student who challenges the traditional college environment and the values of insiders. Rebels and insiders often vie for control over certain areas of the college or university such as government or the college newspaper because of

the influence the medium has on the college campus. Rebels strive to impose their ideas on the student body so that insiders cannot.

### Organization of the Study

Chapter One has provided a general overview of this study on college students' intellectual development and their service-learning experience, and Chapter Two provides a synthesis of the literature on service-learning as well as a conceptual framework, which grounds the study and illustrates the intellectual development of college students as a means to better understand the changes that occur through their service-learning experience. The methodology of the study is discussed in Chapter Three in addition to the qualitative research design and analysis. Chapter Four describes and analyzes the themes that emerged from the data. Finally, Chapter Five summarizes and discusses those themes and the ways in which they inform the research questions, as well as explain the implications for policy, practice, and future research related to service-learning and higher education.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### Overview

This chapter will provide a review of the literature on service-learning in relation to its history in higher education, important figures in the rise of service-learning and college student development, key theoretical frameworks, cognitive development, academic achievement, characteristics of college students as defined by Horowitz (1987), Perry's (1999) theory of intellectual development, and Chickering and Reisser's (1993) theory of identity development. The research examined here provides an analysis of the evolution of service-learning in higher education and college students' service-learning experience, so researchers and practitioners can better understand the theoretical foundations and both historical and current practices. The literature also presents a foundation from which this study can draw. Since this research seeks to examine the way in which college students develop intellectually through service-learning, it is important first to have an understanding of the literature related to students' academic development, the theories associated with service-learning, and existing studies on students' cognitive development, including intellectual development (a more specific term used to define college students' progression as thinking individuals). The literature not only provides the groundwork for current and future research, it also contributes to the body of research on college students and their service-learning experience.

#### Introduction

With attention to service-learning and its relationship to the academic core of higher education, including students' intellectual development, researchers are actively exploring ways effectively to measure or assess the service-learning experience and including students'

intellectual growth. Many individuals involved in the service-learning experience—including students, faculty, practitioners, administrators, and researchers—recognize its importance and impact on student learning and are interested in evaluating it. Because many acknowledged its link to student learning and development, service-learning began to acquire greater credibility in higher education in the mid-to-late 1990s. Eyler and Giles (1999) have observed, “Student enthusiasm and accompanying faculty belief in the power of service to enhance learning have helped to create a surge of interest in service-learning opportunities on campuses” (p. 2). This surge affected the amount of research on and the study of service-learning courses and programs, thereby providing the opportunity for students, faculty, researchers, and practitioners to explore and examine its role in the academic community. As a result, researchers in the field gained an ability to draw upon a plethora of data and make significant contributions to the current literature in the field. Even as student and institutional interest contributed to the community while allowing participants to acquire new knowledge outside of the traditional classroom and to obtain experience in certain fields, external forces heightened the importance and responsibility of college students in all types of communities. With the natural disaster of Hurricane Katrina on the Gulf Coast in 2005, more faculty, students, and administrators from colleges and universities have been prompted to explore ways in which they can participate in the ongoing recovery through service-learning initiatives (Campus Compact, 2005), thereby providing additional opportunities for research.

Research on service-learning explores various aspects of students’ intellectual development, often in relation to other forms of development, but it does not explore the complexities of college students’ characteristics, such as their personal philosophies, motivations, choice of mentors, or worldviews, as defined by Horowitz (1987), and the ways in

which those qualities relate to their intellectual development. Moreover, studies in this area have a broad range of focus, from students' learning and academic achievement to critical thinking and metacognition, which also shapes more generalized research. As a means to expand upon current and past research, this study examines the relationship between college students' service-learning experience and their intellectual development. More significantly, it also explores the way in which students perceived their individual characteristics (Horowitz, 1987), to obtain a more specific understanding and depiction of their intellectual growth and the way in which they were transformed through the service-learning experience. Through this research, service-learning and students' development were examined from the students' perspective in relation to a conceptual framework that incorporated Perry's (1999) theory of intellectual and ethical development, Chickering and Reisser's (1993) theory of identity development, and Horowitz's (1987) model of student groups. The theorists, Perry and Chickering and Reisser, and the historian, Horowitz, provide the groundwork for a conceptual framework which illustrates the service-learning experience of three groups of college students, defined by Horowitz —the insider, the outsider, and the rebel. These groups experience intellectual development in different ways and change because of the service-learning experience, a process which is depicted in the conceptual framework and discussed in chapters Four and Five.

This chapter provides an overview of the literature relevant to service-learning, students' intellectual development, and college students' individual characteristics or types. It then identifies the literature on service-learning related to Perry's (1999) theory of intellectual and ethical development, Chickering and Reisser's (1993) theory of identity development, and Horowitz's (1987) model of college student groups, as well as students' cognitive development, learning, and academic experience. The individual characteristics of students who participate in

service-learning are examined along with the conceptual framework, a discussion which concludes the chapter and provides a foundation for the subsequent data analysis.

### Philosophical Foundations for Service-Learning

To obtain a more complete understanding of the influences and evolution of service-learning, one must first acknowledge its significant philosophical foundations, developed by both individuals and social movements in society and higher education. One individual who strongly influenced the growth and development of service-learning in higher education was John Dewey, an American philosopher known for his teachings at the University of Chicago, his involvement and promotion of practical experience in the education of an individual (Westbrook, 1991), and his work with one of Chicago's settlement houses, Hull House (Addams, 1994). Dewey's innovative and progressive ideas about the relationship between education and his pragmatic, hands-on methods influenced both influenced the way people thought about the educational system and society and encouraged individuals to participate in society and to take an active role in democracy. According to Elias and Merriam (1995), in their discussion of philosophies of adult education:

For Dewey, education would flourish if it took place in a democracy; democracy would develop only if there were true education. Democratic societies were intentionally progressive and aimed at a greater variety of mutually shared interests...Thus for Dewey a democratic society was committed to change. (p. 49-50)

Because of their connection between experiential learning and effecting positive change in society, Dewey's philosophies were an integral part of education, not only with respect to individual learning and development, but also as a means to bring about improvements in the society of which individuals were a part.



Service-learning can be linked to Dewey's philosophy in two main ways. First, experiential learning enables college students to apply what they have learned from theory to a "real" setting. Second, students who participate in course-related service-learning programs are able to make a contribution to their society through the actual service they provide. Also, by becoming more aware of and involved with the issues that individuals, service, non-profit and governmental organizations, and educational systems face, students can make more better-informed and more inclusive decisions regarding their lives and the lives of others. In relation to increasing one's awareness through education, Dewey (1966) wrote, "I believe that education is a regulation of the process of coming to share in the social consciousness; and that the adjustment of individual activity on the basis of social consciousness is the only sure method of social construction" (p. 9). Although Dewey focused more on the impact of practical experience in education as a means to effect positive social change, as opposed to stressing intellectual development, his reference to "social consciousness" is relevant to the discussion of cognitive changes, especially through service-learning. At the same time, despite his connection to service-learning and his influence on the development of learning through service, Dewey's framework did not provide a solid foundation from which to draw, in part because it does not fully illustrate the relationship between service-learning and college students' intellectual development.

Along with Dewey's influence, other theoretical and practical examples illustrate the development of service-learning in higher education. Service-learning in higher education, from a historical perspective, has varied. From Dewey's instruction at the University of Chicago and in Hull House (Addams, 1994) to modern service-learning departments on college campuses, service-learning has been a part of the experiential and theoretical education of young adults in

some form for over a century. It has evolved from activist, community-oriented initiatives developed by university faculty and college students to become a significant part of the university curriculum designed by faculty, student affairs professionals, and university administrators. As a result, service-learning has come to include myriad activities and definitions developed by members of the university and the community (Stanton, Giles, & Cruz, 1999).

Using an historical framework, Stanton, Giles, & Cruz (1999) discussed the pioneers of service-learning and examined the characteristics of those who implement or become involved in service-learning programs. They argued that individuals in the field often had a strong sense of self and ability, as well as a deep religious, ethical, political, or spiritual motivation to become involved in service opportunities. These pioneers, especially in the 1960s and 1970s, had a strongly activist way of thinking, influencing their interest in exploring the relationship between the community and the university. In addition, the political and social unrest of that time broke down the walls between the university and the community.

Such research is important, since it provides a historical foundation for service-learning, so students, faculty, and researchers can gain a perspective on its origin and influences. Researchers and practitioners today therefore have a better understanding of the evolution of service-learning, as it has shifted its focus and its priorities. The historical foundation of service-learning, provided by Dewey (1966) and Stanton, Giles, & Cruz, (1999) provides necessary background information and the evolution of service-learning. Dewey wrote, “Education may be conceived either retrospectively or prospectively. That is to say, it may be treated as a process of accommodating the future to the past, or as an utilization of the past for a resource in a developing future” (p. 79). In this context, Dewey’s definition of education can be correlated to the history of service-learning and the decisions that researchers and practitioners face today.

While it is undoubtedly important to explore the history of service-learning, this examination should be used prospectively, to inform future research and practice. Given its history, researchers should focus on the current influence of service-learning on college students' experience, especially as it relates to their intellectual development.

### Learning Through Service

Service-Learning and Student Learning In addition to the historical aspects of service-learning, many researchers examine the relationship between service-learning and student learning, as defined in the broadest sense, including, but not limited to, being educated about their role as a concerned citizen, as an activist, and as a leader. This research contributes to the study of service-learning and illustrates that student learning occurs and manifests itself in many guises. For instance, Rhoads (1997, 1998) examined, through qualitative research, students who participated in service-learning and volunteerism and the development of the "caring self," focusing on the scholarship of interpersonal and personal development of students in postsecondary education. He used the theoretical frameworks of Dewey, Mead, and Gilligan to illustrate the importance of students as "social beings" who have a connection with others. This foundation enabled Rhoads to explore the "citizenship education" (p. 277) of college students who participate in service-learning and the themes which emerged from his study, including students' self-exploration, understanding others, and social good. Rhoads (1998) stated, "the focus is not on student learning per se" and is more interested in exploring the identity of students as social beings and their education as citizens (p. 283). That said, Rhoads (1998) acknowledged the relationship between student learning and the education of students as democratic citizens by analyzing the correlation between student learning and service-learning.

Bickford & Reynolds (2002), in their discussion of service-learning and activism, present another form of student learning through service-learning. Their study explored the relationship between service-learning and activism and the opportunities for students to ask questions beyond the experience they have with the community through service-learning. With an activist lens, according to Bickford & Reynolds, students can be taught to inquire “What causes illiteracy?” instead of “Why can’t Johnny read?” (p. 238). They also emphasized the importance of supporting and encouraging students to analyze the new environments in which they are immersed through service-learning, showing that observation and reflection are not sufficient for truly understanding the way in which the environment operates.

Gardner, Van der Veer, et al., in their 1998 study of college students during their senior year, addressed multiple examples of student learning, and, in their discussion of service-learning, focused on its relationship to leadership development. The researchers provided examples of leadership programs and majors at various colleges and universities and the way in which service-learning was incorporated. Based on the literature they presented, Gardner, Van der Veer, et al. also made recommendations to colleges and universities for enhancing students’ senior-year experience. One of these recommendations included service-learning programs; they indicated that it would be beneficial for students to “fulfill public service obligation, earn money, build a resume, and learn under supervision range of skills and understandings that will serve them through their life” (p. 278). The type of learning through service-learning that Gardner, Van der Veer, et al. (1998) described provides researchers and practitioners with a starting point from which they can further examine service-learning and student learning.

Despite the valuable information that this research provided in exploring the roles of students in relation to their learning and service-learning, the literature on service-learning must

begin to focus on college students' intellectual development, which is central to the academic mission of colleges and universities. Furthermore, the studies that examine students, their learning, and the roles with which they may identify are relevant, and yet do not provide course related service-learning programs with the credibility that allows them to be recognized by faculty and university administrators. Furthermore, by making student learning part, rather than the focus, of other benefits of service-learning, researchers, practitioners, and the academic community are provided with general information that does not enable them to establish service-learning as a credible pedagogical method or even as a department within the university. It is only through the emphasis on the close examination of what occurs through student learning, and therefore students' intellectual development, that we can provide an in-depth analysis of the service-learning experience.

*Theory/Theoretical Frameworks for Service-Learning* Because of the array of disciplines from which service-learning emerged, the theories on which it is based include a range of perspectives. This diversity perpetuates discussion in the literature about service-learning's history, frameworks, practice, and future. Speck and Hope (2004) provided a thorough description of various theoretical frameworks for service-learning in their edited volume, entitled *Service-Learning: History, Theory, and Issues*. By examining justifications and critiques of different models for service-learning, Speck and Hope organized the numerous ways in which service-learning could be framed. They began with the presentation of a historical framework, based mainly in governmental and organizational structures of service and service-learning, providing the reader with a foundation from the 19<sup>th</sup> and 20<sup>th</sup> centuries. This framework, unsurprisingly, included an examination of Dewey's theory, steeped in progressivism and concentrating on the individual's role in society and democracy. The authors then presented

various models through which to study service-learning and the advantages and disadvantages of each framework. For example, they discussed a philanthropic model, a civic engagement model, a communitarian model, and concluded with a specific university model in which ethics and service-learning are explored.

While the examination of each model contributes to the general discussion of service-learning, two additional articles provide necessary material for this study of students' intellectual development and their service-learning experience. First, in "A Critique of the Civic Engagement Model," Exley (2004) demonstrated that while the exploration of civic engagement and service-learning has merit, this model does not provide credibility for service-learning's educational value. He stated, "...the most effective rationale for the service experience has always been its power to assist the student in mastering course content" (p. 86). Exley went on to describe service-learning in the context, not only of student learning, but also of students' intellectual development. He explained like service-learning, student development also occurs in stages or levels. In this context, Exley began to incorporate Perry's (1999) theory of intellectual and ethical development and demonstrated the stages in which students move through as a result of their service-learning experience. He explained the importance of focusing on student's cognitive development: "Through service-learning...students are placed in cognitive situations where the prior belief structures cannot help but be challenged" (p. 92). Exley drew upon Perry to defend his argument for placing greater value on students' cognitive development, mainly emphasizing the support students will need from service-learning advocates and faculty due to the challenges of making sense of new information during and after the service-learning experience and incorporating or making space for that information. It is here where researchers

can expand upon the questions associated with college students' intellectual development and areas such as these that need further examination.

The second article to be examined further is Murphy's "Critique of the Communitarian Model" (2004), which challenges the assumptions that individuals are naturally communal and that the communitarian model provides an opportunity for students to connect civic knowledge and academic preparation. Murphy questioned the degree to which "individuals can be expected to embrace social roles and social responsibilities for which they do not feel an inherent identification" (p. 130). Instead, Murphy argued that service-learning can provide an opportunity for students to internalize the experience "as part of a process of self-identity and self-determination" (p. 128). While Murphy made some interesting points as she challenged the assumptions about human nature as inherently social, her primary focus was on the flaws of the communitarian model. As a result, she failed to include areas or models which should be studied in this context. Nonetheless, the notions of students' self-identity in relation to service-learning would be interesting to explore further, especially in relation to Horowitz's (1987) models of college students. College students have different values, priorities, and interests in relation to their college experience; therefore, it is important to take these characteristics into consideration when examining their intellectual development. Doing so will also provide for a richer analysis.

Billig and Eyler (2003), in their edited volume *Deconstructing Service-Learning*, explored the importance of theory based research related to service-learning and identified Bringle's (2003) description of Dewey's theoretical framework as a strong foundation for service-learning. Bringle also examined other theories that draw upon Dewey, including Kolb's (1984) experiential learning theory and Giles and Eyler's (1994) and Hatcher's (1997) use of

Dewey's educational theory. Furthermore, according to Bringle, there are two additional sources for theory, which include "1) theories developed specifically for service-learning, and 2) theories borrowed from cognate areas" (p. 9). As a means for better understanding the origin of these types of frameworks, Bringle identified the following methods for developing theories for service-learning: intensive case study, paradoxical intent, metaphor, rule of thumb, and conflicting results. By examining the way in which service-learning theory originated, researchers can produce theoretical frameworks, which provide sufficient grounding for the concepts and practice of service-learning in higher education. Furthermore, in order to attain a more thorough understanding of the theory developed from the cognate areas, one must explore frameworks such as functional theory, attribution theory, equity theory, written reflection, intergroup contact, and self-determination theory (Bringle, 2003). Whether the theories were developed for service-learning or borrowed from another discipline, they provide an important foundation for the discussion on studies related to the practice and impact of service-learning. Furthermore, the theories also contribute to the research on theory, an area in service-learning that had been historically overlooked until recently.

In addition to the attention to various theories to frame the discussion on service-learning, Eyler (2002) observed that many service-learning practitioners argue that to understand service-learning better, qualitative research is the most appropriate method. Eyler wrote:

The notion is that qualitative study echoes the integration of heart and head that is at the core of service-learning pedagogy and that the most important effects of service-learning cannot be measured on a survey form, a standardized test, or a final exam (p. 6).

She further addressed the importance of the procedures of qualitative research to establish and form a sound study with value and credibility. Of course, the study of service-learning would not



be complete without some form of quantitative data, and yet her assertions are valid ones. Interviews, observations, and document analyses are critical components for developing an in-depth, thorough analysis of a service-learning experience. Thus, it is through qualitative methods that researchers can explore the relationship between thought and feeling, head and heart, ideas and compassion, and mind and emotion as they relate to college students' experience through service-learning and their thoughts on how they have changed intellectually.

From the field of higher education, King and Kitchener's (1994) college student development theory of reflective judgment examined students' ways of reasoning through seven stages of knowledge and problem solving, some of which were drawn from elements of Dewey's notions of reflective thinking (Evans, Forney, & Guido-DiBrito, 1998). According to King and Kitchener, the seven stages are comprised of three categories: 1) prereflective thinkers, 2) quasi-reflective thinkers, and 3) reflective thinkers. The first category, prereflective thinkers, includes three stages, where individuals move from believing that knowledge is certain and can come from individual experience, authorities, and one's own opinions. In the second category, quasi-reflective thinkers, individuals move through two stages where knowledge becomes less certain and more tenuous as well as more subjective. The final category, reflective thinkers, consists of two stages, which include the use of personal opinion and evidence from reliable sources as well as evaluation methods. Individuals in this category move towards a higher level of evaluation and reevaluate when there is new information to consider. King and Kitchener's exploration of the process of young adults' reasoning, beliefs, assumptions, and problem-solving methods enables researchers to examine the development or progression of these thought and reasoning processes.

Eyler and Giles (1999), in their discussion of college students' learning and service-learning, used King and Kitchener's (1994) foundation to portray their analysis of students' critical thinking, a characteristic, they argue, that is a component of college students' intellectual development. Eyler and Giles asserted that the development of students' cognitive skills, "a way of organizing and understanding reality", based in the research of Piaget, shape students' ability to think critically (p. 108). While they briefly addressed Perry's (1999) theory of intellectual development in this discussion, Eyler and Giles much more closely examined King and Kitchener's reflective judgment model in their analysis of the development of students' critical thinking through the service-learning experience (p. 108). Throughout their analysis of King and Kitchener, Eyler and Giles depicted examples of the various stages students may be based on their responses, experiences, and problem solving abilities through service-learning. King and Kitchener's reflective judgment model provides an important theoretical framework for addressing the process that young adults undergo as they analyze and formulate solutions to problems, especially in their discussion of the ill-structured problem. However, the literature on service-learning must include, not only a student development theory or a "problem" that needs resolving, but also a framework that incorporates both a college student development theory and attention to the characteristics of students that participate in service-learning.

*Service-Learning and Academic Achievement* There has also been significant discussion of service-learning and students' learning and academic achievement (Eyler & Giles, 1999; Eyler, 2002). The literature on the academic achievement of college students is important to explore because of the relationship among success in course-related service-learning programs, the grades students earn in these courses, and their intellectual development. Given the definition of intellectual development of college students used in this study, based on Eyler and Giles' (1999)

research, the areas that are most closely linked with academic achievement are critical thinking and learning and application material. Critical thinking, according to Eyler and Giles (1999) “...allows students to identify, frame, resolve, and readdress social issues” (p. 101). With this kind of capacity for intellectual thought, students in a course-related service-learning program are likely to assess the information from the course and make significant connections to the service-learning experience, which will therefore have having an effect on their critical thinking skills and academic achievement in the course. In the second area of intellectual development, which is linked with academic achievement and learning and application material, Eyler and Giles (1999) demonstrate that “academic material is to be able to see its relevance to new situations” (p. 64). They also describe this application of subject matter in the context of service-learning: “Deeper understanding and application are central to the goals of service-learning...” (p. 71). Finally, Eyler and Giles explained that, although college students claimed that they learned more through service-learning courses, the research on grades and service-learning has not been clearly defined. These areas of the definition of intellectual development—critical thinking and application of subject matter and experience—provide examples of college students’ intellectual growth while suggesting the possibility of earning higher grades than do students in traditional college courses without a service-learning component.

The following studies will demonstrate the connections found between service-learning and students’ academic achievements. The relationship between course grades and intellectual development can be seen in studies of students’ research opportunities with faculty and service-learning (Checkoway, 2001), academic achievement and social responsibility developed through service-learning (Kezar and Rhoads, 2001), participation in course-related service-learning programs and earning higher grades (Markus, Howard, & King, 1993), students’ applying

theoretical concepts from coursework to practical situations (Kendrick, 1996), and the academic mission of the university (Schaeffer et al., 2003). Checkoway's article on renewing the civic mission in higher education discussed the role of the research institution, the way in which student learning can be improved, and how research universities can take an active role in American society. Checkoway argued that college students should be engaged in research with faculty that attend to issues in the community, participate in service-learning courses, and join organizations that promote civic involvement. In order to solidify his point about service-learning, Checkoway highlighted the value of service-learning in relation to learning and academics. By drawing upon the research of Conrad and Hedin (1991), Giles and Eyler (1994, 1999), and Rutter and Newman (1989), Checkoway also emphasized the development of knowledge, academic achievement, and problem-solving abilities through the service-learning experience to illustrate the value and impact of service-learning in the research institution. Finally, he concluded, when faculty incorporate service-learning in their classes, college students experience "community based learning that develops substantive knowledge, cultivates practical skills, and strengthens social responsibility" (p. 143). Engagement in service-learning is associated with academic engagement because of the real acquisition of knowledge and information. Checkoway's study demonstrated the relationship between academic achievement and service-learning while also emphasizing the value of service-learning in research institutions.

Kezar and Rhoads (2001) not only asked questions about the role of service-learning in the university, they described its link to student learning, cognitive development, and academic achievement, as well as citizenship and social responsibility. They invoked Zlotkowski's (1995) explanation that the very survival of service-learning depends upon the incorporation of student learning, academic disciplines, and cognitive development. Kezar and Rhoads concluded by

illustrating the relationship between cognitive and affective domains. They stated, “The need for a seamless view of learning is readily apparent when one understands that affective concerns, like helping students develop social responsibility, often involve cognitive processes...” (p. 156). These “tensions” or questions enable the researcher, practitioner, and the student who is involved with service-learning all to see the complexity of learning, the intricacies of reflection, and the value of incorporating both academics and society, both of which are at the core of service-learning.

Other ways in which researchers and practitioners explore student learning and achievement include examining the role of service-learning in an academic course. Two such studies include Markus, Howard, & King’s (1993) study of the integration of service-learning in a political science course and Kendrick’s (1996) research on the outcomes of service-learning in a sociology course. Markus, Howard, & King began their study in response to educators’ questioning of the academic impact of service-learning and the newness of incorporating service in academic courses. By examining the impact of service-learning in two sections of political science in comparison to six “control groups” (sections of political science that did not incorporate service-learning), they found that students who participated in the service-learning course were “more likely to agree that they performed up to their potential...[and] were significantly more likely than those in the control group to report that they ‘learned to apply principles from this course to new situations’” (Markus, Howard, & King, 1993, p. 414). Most interestingly, Markus, Howard, & King “found that students’ *academic learning* was significantly enhanced by participating on course-relevant service-learning,” because there was a statistically and substantively significant difference in the grades earned in the service-learning based course (emphasis added, p. 416). Students earned higher grades in the service-learning-

based political science course than did the students in the control group. In addition, the researchers also addressed the value and importance of service-learning as a method to educate students about their “roles as citizens,” thereby illustrating the multiple purposes of the service-learning.

The second study, conducted by Kendrick (1996), examined the impact of service-learning on first-year students in an introductory sociology course. Using Markus, Howard, & King’s (1993) study as a model, Kendrick used participants enrolled in one of two undergraduate sociology courses. 81% of the students did not realize that one of the sections was a service-learning based course, indicating that most of the participants were not self-selecting. Kendrick found that there were statistically significant results for students in the areas of motivation, social responsibility, and volunteering their time. There was also higher means of service-learning students in the areas of application of knowledge and interest in subject area; yet, the differences were not significant. Kendrick concluded by emphasizing the importance of service-learning in relation to students and faculty as responsible community members, which illustrates the focus on other areas besides academic outcomes in a course-related service-learning study. In regards to the learning outcomes, Kendrick argued that “service-learning promotes quality of thought” (p. 79) yet this statement lacked impact, since he did not fully define what he meant by “quality of thought.” Based on the findings in this study, discussed in Chapter 4 and 5, Kendrick’s definition can be further described as college students’ knowledge or understanding of the perspective or framework from which others view or work, respectively. College students’ quality of thought represents a depth not only of understanding material through service-learning, but determining the context from which others, such as researchers or authors, operate

to better comprehend their objectives, motivations, and purposes for presenting the research or material in the way they do.

In addition to the focus on students' academic learning, some studies take a broader view of student learning. In Schaeffer et al.'s (2003) chapter, "Ethical Relationships in Service-Learning", one question involves where faculty should put their attention—intellectual development or moral development. The researchers discovered that, through service-learning, both students and faculty focused on student learning when they were faced with situations that were "frustrating or unresolved" (p. 161). Moreover, in their analysis of the partnerships between the community, faculty, and students, faculty addressed student learning, students focused on their progress in the service-learning course, and the community attended to the community's priorities (Schaeffer et al., 2003). Similarly, Steinke et al. (2002) also found that faculty prioritized students' processing of the service-learning experience during the service or course work. Despite the examination of students' intellectual or moral development, the research tended to emphasize the academic component of the experience because of colleges and universities' academic mission. Because of the significance of service-learning in relation to academics, we must also examine college students' intellectual development.

The research on college students' service-learning experience and their academic achievement is thus varied, rendering it challenging to make the case for the value of service-learning in relation to higher grades and increased learning in higher education. Nonetheless, because of the studies that illustrated some positive changes in academic success in service-learning based courses, there is value in exploring this area further. In addition, by focusing on aspects on Eyler and Giles' (1999) intellectual goals of higher education, including learning and application of material, critical thinking and problem solving, and perspective transformation,

researchers are better able to define more specifically the connections between academic achievement and service-learning. Moreover, by taking into consideration students' individual characteristics, research will move closer to a more complete understanding of the relationship between college students' intellectual development and their service-learning experience.

### Students who Serve

Exploring student learning and the academic achievement of college students in relation to service-learning is a significant area of higher education research. In the same fashion, the theories and theoretical frameworks that shape researchers' and practitioners' understanding of intellectual development are also significant. Nonetheless, without a detailed understanding of the college students who participate in service-learning based courses, the characteristics they currently possess, and the way in which they develop through the service-learning experience, the study of intellectual development and service-learning remains incomplete.

The examination of students who serve is important for three main reasons. First, it can add depth to the interpretation of data collected on students' service-learning experience. Observing the nuances of student characteristics in relation to their intellectual development should provide additional insights and knowledge. Second, since there is consensus among higher education researchers that college students develop in a variety of ways, one must acknowledge that students might develop differently because of their distinctive characteristics. It is important to study students' characteristics, the ways in which they are unique, and the ways in which they are similar to other students. Third, this analysis of the characteristics of students, based on Horowitz's (1987) model, in relation to intellectual development, makes this research different from other studies on college students' intellectual development and their service-learning experience. By examining the characteristics of students, this study will illustrate the



significance of including students' characteristics in relation to service-learning and students' intellectual development. It will also be unlike other studies of service-learning and intellectual development; for some perspective on this subject, it is important to understand the research that has already been done.

Some research on service-learning and college students has examined the characteristics of students who participate in service-learning programs, whether required or voluntary service-learning (Eyler, 2002; Stenson, Eyler, & Giles, 2003). Other research, by contrast, has explored students' developmental stage in relation to their participation in service-learning (Yarbrough & Wade, 2002). In her article, which attempted to improve research designs used to examine service-learning, Eyler addressed the issue of students who choose to participate and those who are required to participate in service-learning. She also examined students' motivations to serve. She asserted, "While attempts are made to control statistically for differences among groups in quasi-experimental survey designs, the fact remains that those who choose to perform service or service-learning may differ in many ways from those who do not engage in those activities" (p. 6). The students who volunteer to participate in and complete service-learning courses, it is argued, possess different characteristics than students who are required to participate in service-learning to fulfill a curricular or institutional obligation. Subsequently, Eyler argued that the changes experienced through service-learning may actually have more to do with characteristics that students bring with them to the service-learning course, as opposed to the service-learning experience itself. In relation to this study, some may question if students are required to participate in service-learning due to a curriculum or institutional requirement. While this question is valid, for this study, the focus will be on the students who participate in service-learning and their intellectual development in relation to Horowitz's (1987) model of college

students. The students' characteristics will be examined through Horowitz's lens, as opposed to their choice to participate in service-learning or not to participate, because his framework provides a more descriptive means for understanding service-learning as it relates to college students' intellectual development.

Furthermore, in a discussion on the problems with service-learning research, Eyler (2002) explained that much of the personal, and what she refers to as "cognitive" development of students occurred over a longer period of time than one semester; yet, much of the research is not longitudinal and does not explore the experiences and ideas of students after they leave college. These aspects of the research are critical to examine further, especially the notion of students' characteristics that are brought to the service-learning experience. Although longitudinal studies are needed, it is also necessary to delve further and examine students' characteristics, as defined by Horowitz (1987) in relation to developmental theories such as Perry's (1999) and Chickering and Reisser's (1993).

Yarbrough and Wade (2002) also understood the value of studying the characteristics of students who participate in service-learning, which is evident in some of the questions they pose to distinguish service-learning from community service. The questions were organized by category, which included: 1) needs for program and the problems the program will address, 2) characteristics of people affected (program recipients and students), 3) addressing needs (or solving problems, 4) program goals, 5) resources, 6) program implementation, and 7) outcomes/impact. In the section on "Characteristics of People Affected," they addressed the following questions about students:

- a) Will the program affect them all similarly?
- b) In what ways do their activities and experiences need to be individualized to maximize their learning?

c) How do developmental issues play out for learners at different ages or in different developmental stages?

Here, one can see the importance of taking into consideration the characteristics of students who participate in service-learning. Though an awareness that students bring individual characteristics to the service-learning experience and are significantly influenced by it, one can offer a more thorough examination of their intellectual development.

By incorporating the types of questions related to “Characteristics of People,” as depicted by Yarbrough and Wade (2002) in their study on service-learning, researchers will be able further to examine individual student learning and, potentially, their intellectual development. For instance, the first question, “Will the program affect them all similarly?”, may enable the researcher to explore the various ways in which students are influenced by the service-learning experience and how they see the experience affecting them. The second question, “In what ways do their activities and experiences need to be individualized to maximize their learning?”, suggests that students have individual characteristics that can potentially complement the questions raised by Horowitz’s (1987) model. The third question, “How do developmental issues play out for learners at different ages or in different developmental stages?”, could be another way to consider Perry’s (1999), Chickering and Reisser’s (1993), and King and Kitchener’s (1994) theories, by examining the various stages of intellectual development and stages of identity development. These questions, when incorporated in a study on service-learning, provide for an in-depth analysis of the students’ experiences.

Another way in which characteristics of students and service-learning have been examined is in Stenson, Eyler, and Giles’ (2003) chapter on “Service and Motivation to Serve,” in which the authors study students’ intrinsic motivators to participate in community service. Stenson, Eyler, and Giles summarized the research on students’ motivation to serve and

found that the most common reasons included establishing altruistic values, setting or meeting expectations, gaining work and/or personal experience and knowledge, meeting people, and self-esteem. More important to the present study, their research explained that students' motivation related to their intellectual development. For instance, one of the intrinsic motivators included being faced with "challenging problems to solve" (p. 200), an area to explore further in an examination of students' intellectual development. Also, in their discussion on future research, Stenson, Eyler, and Giles recommended a pre-test/post-test survey where a potential response for "During my community service....I was free to develop and use my ideas" (p. 208) could be explored. In sum, this chapter illustrated the relationship between examining student's motivation to serve and their intellectual development. Finally, like Eyler (2002), in her article on improving research design, Stenson, Eyler, and Giles addressed the significance of student choice in service-learning, as opposed to required service-learning, as a variable to be considered. The questions in the research related to the students who are likely to participate in service-learning illustrate the need to examine further, not only the motivating factors, but also the characteristics that students bring to the service-learning experience. With a more in-depth understanding of the characteristics of individual and groups of students, including their motivation to serve, this study will be able to examine students who participate in course related service-learning programs more closely, as well as the relationship of those characteristics to intellectual development. While Yarbrough and Wade (2002) and Stenson, Eyler, and Giles (2003) begin to demonstrate the importance of students' individual characteristics in relation to service-learning, they do not rigorously correlate these factors with students' intellectual development.

### Cognitive Development

The examination of students' cognitive development is another area of the literature related to service-learning that is important to both its research and practice (Codispoti, 2004; Exley, 2004; Eyler, 2002; Eyler & Giles, 2002; Murphy, 2004; Steinke, et al., 2002; Steinke & Fitch, 2003). Because colleges and universities embody learning, exploration and exchange of ideas, and development of critical and analytical thinking skills, studying students' cognitive development in relation to service-learning would make significant contributions to the theory, research, and practice of service-learning on college campuses. The research on students' cognitive development not only adds to the literature on service-learning, it also enhances the credibility of the research and practice of service-learning in higher education. The following literature describes the examination of college students' cognitive development.

In his chapter on the critique of the civic engagement model for service-learning, Exley (2004) depicted the value of cognitive development through Perry's (1999) framework, as well as the more subtle, underlying aspects of cognitive development through the service-learning experience. Exley emphasized, not the practical, experiential nature of service-learning, but rather the ambiguity of the service-learning experience, as well as the way in which students' belief systems are challenged as a result of being "placed in cognitive situations" (p. 92). When students are forced to question their ideas and beliefs because of their new experiences, new relationships, and exposure to different environments, their level of cognitive development changes, bringing them to another stage of thinking and understanding.

In addition to students' experiencing shifts in their thinking and beliefs, they are also encouraged to probe and ask questions to examine their ideas and develop their cognitive thinking abilities further. While Murphy (2004) challenged the communitarian model as a

framework for service-learning, Codispoti asserted its importance, emphasizing the cognitive components of student development in relation to working relationships and shared efforts. Codispoti (2004) began his discussion on the value of community learning by quoting Tinder (1980), who stated, “it is of the human essence to ask after, but not to possess, the truth” (quoted in Codispoti, p. 105). The emphasis here is on the process of continuously seeking the truth, asking questions, inquiring about established ideas, and challenging current notions, as opposed to being content with finding “the truth.” This form of inquiry enables individuals to develop their cognitive skills, and service-learning provides students with both the opportunity and the venue to make these inquiries. Furthermore, Codispoti addressed the issue of ethics and sharing ideas in an intellectual environment. He noted, “If students are a part of an intellectual community, they must learn and practice traits of honesty so that communication can be trusted. They must learn respect for the positions of others so that there is free and open discussion” (p. 111). Codispoti emphasized the importance of the communitarian model, not only because students, faculty, and community members share the work in service-learning efforts, but also because it is a setting where students can develop their skills as a member of a group to enhance their communication skills in the established intellectual environment. Here, Codispoti referred to an “intellectual environment” for students to develop their cognitive skills. While he distinguished between “cognitive” and “intellectual” to describe students’ development and their environment, respectively, studies such as these could more clearly delineate these terms.

Another important aspect of cognitive development includes students’ changing their perspective about previously-held beliefs, ideas, and people. Through their service-learning experience, students experience changes in their thinking. According to Eyler and Giles (2002), these changes occur when service is well integrated in the course. This research provides further

evidence of the way in which students were likely to develop intellectually because of their interaction with members of the community affiliated with the service-learning project (Steinke, et al., 2002). Steinke et al. stated, “The two positive correlations with intellectual development were: the project met needs that were identified by members of the community, and students interacted with people in the community about the project” (p. 94). This engagement with other individuals with whom students might not ordinarily interact provides them with the opportunity to rethink established ideas, thereby going through the process of seeing another or additional perspectives and ultimately affecting the way in which they think. This exploration of new views may also be challenging and confusing for students; yet, this also illustrates an aspect of cognitive development. Eyler (2002) asserted that service-learning “is about having assumptions challenged through confronting new perspectives or puzzling experiences and learning to sort out complex, messy real-world situations...This suggests that educators need to identify aspects of academic learning and cognitive development that are enhanced by this process” (p. 9). Here, Eyler addresses the relationship between students’ changing perspectives and ideas, which are challenged through the service-learning experience. Moreover, when students come to terms with the ambiguity of these varying viewpoints, they develop more advanced levels of cognitive thinking. Thus, without these challenging ideas’ being challenged as a result of new experiences and environments, students may not attain higher levels of cognitive development.

Researchers who study service-learning have also found that significant reflection on students’ service-learning experiences and application of knowledge fosters students’ cognitive development. Eyler and Giles (2002) examined the relationship between service and learning and the influence of “consistent and continuous reflection” on critical thinking. Through interviews and focus groups, they found that students who participated in service-learning

courses, where “reflection was intense and frequent,” had the most significant changes in their thinking. Steinke et al. (2002) explained that ongoing reflection is considered a principle of good practice in service-learning, in that it allows students to take their experiences and put them “into a broader context,” beyond their own lives (p. 77). Similarly, Steinke and Fitch (2003), after completing their study of cognitive development of students by analyzing written protocols, recommended that problem-solving protocols be incorporated as a class reflection tool. They argued that the protocols should be used during and before the course, in addition to end-of-the-semester projects, in order to obtain a better understanding of students’ cognitive development. Finally, Eyler and Giles (1999) demonstrated that the application of students’ service-learning experience to course work occurs because of their reflection on the experience and the material, which also leads to significant cognitive development.

Eyler and Giles (1999) have conducted a thorough, important, and influential study on students’ learning and their service-learning experience; yet, there are some aspects of the research that should be examined further. First, despite their comprehensive analysis of students’ development, the term “reflection” is questionable in relation to students’ cognitive development. While “reflection” can be considered a tool of cognitive development, the term “intellectual” is associated with reflection (Webster, 1965). Second, although the discussion on students’ cognitive development and service-learning plays an integral role in current research, it is also important to consider students’ individual characteristics and their academic coursework to obtain a comprehensive analysis of service-learning as it relates to students’ intellectual development. As a means to address these issues, this study clarifies the terms “intellectual” and “cognitive” and adds a layer of analysis to students’ intellectual development by combining



Horowitz's (1987) definitions of college students with both Perry's (1999) model and Chickering and Reisser's (1993).

### Student Development Theories

Perry's Theory of Ethical and Intellectual Development Perry's (1999) theory of intellectual and ethical development is significant in classroom learning as well as learning that occurs outside the traditional academic arena, such as service-learning. Perry described experiential learning as follows: "All students can benefit from direct learning opportunities, but students at the lower levels of cognitive complexity tend to need such experiences in order to really cement their learning" (p. xxxiv). Service-learning programs are important examples of experiential learning, and the experiences of students can be explored through interviews, observations, and document analyses in order for researchers to see the impact of service-learning on students' intellectual development. In this context, Perry's (1999) framework can provide a facet of the necessary framework to better understand college students' development through service-learning.

Perry (1999) asserted that college students experience nine "positions" of intellectual and ethical growth as they traverse their academic career. He chose the term "position" rather than "stage" to emphasize that there is no specific duration of time that a student takes to go through each one, as well as to demonstrate the importance of the student's perspective at that time (Perry, 1999). The nine positions include Basic Duality (Position 1), Multiplicity Pre-legitimate (Position 2), Multiplicity Subordinate (Position 3), Multiplicity Correlate (Position 4), Relativism Correlate (Position 5), Commitment Foreseen (Position 6), Initial Commitment (Position 7), Orientation in Implications of Commitment (Position 8), and Developing Commitments (Position 9). The positions can be grouped into between three and five positions, defined by the relationship between them. This study will organize them in four broad positions:

dualism, multiplicity, relativism, and commitment to relativism. Students tend to begin their college career in the dualistic position, where they seek one “right” answer, depend heavily on authority for that answer, and view information in terms of black/white or right/wrong. They then move towards a multiplistic way of thinking, where they become aware of and accept varying opinions; yet, from this position, all opinions may seem correct, even though there may be more evidence for some than others. Students move towards more independent thinking to the position of relativism, where they begin to distinguish the validity of opinions and perspectives through evidence and logic. They then reach commitment to relativism, where students begin to make choices and decisions based on the intellectual abilities that they have established; hence, they lead into the position related to ethical development because they not only assess the validity of an idea, they also evaluate its relationship to ethics.

Because Perry’s (1999) theory about college students’ ethical and intellectual development has been such a significant theory in practice and research in higher education, it plays a critical role in the present framework and is used to examine and explore service-learning and college students. Although there is not a significant amount of research on students’ cognitive development in relation to their service-learning experience, the studies that do examine the topic often incorporate Perry’s theory in the discussion. Eyler and Giles (1999) provided one of the most comprehensive examinations of service-learning’s influence on students, including practical experience gained, developmental (cognitive) growth, critical thinking, and development as citizens and agents of change. They utilized Perry’s theory of intellectual and ethical development and King and Kitchener’s (1994) reflective judgment model as a means to understand students’ cognitive development through the service-learning experience. Also, in Speck and Hoppe’s (2004) edited volume, various theoretical models are

described in the context of service-learning, along with the criticisms of these models. Exley (2004) argued that the civic engagement model did not sufficiently capture the essence of service-learning and did not support service-learning in higher education because of the absence of connections between service and academics, on the one hand, and service and learning, on the other. As a means to justify his assertions, Exley focused on the academic and intellectual aspects of service by exploring the experiences of students and their connection to their critical thinking and cognitive development, using Perry's framework to illustrate their development.

There are two issues associated with existing research on service-learning and college students' intellectual development. First, the lack of clarity of definitions of intellectual and cognitive development must be addressed in order for researchers and practitioners to understand college students' development with respect to these related, yet different concepts. Second, while research on service-learning and students' intellectual development is valuable to the field of higher education, it also does not specifically assess students' individual characteristics, as analyzed by Horowitz (1987), or the varying ways in which they develop intellectually using Perry's (1999) model.

Steinke and Fitch (2003) also depended upon Perry (1999) to depict how students develop, and their description and evaluation of students' development operates through written protocols. These protocols incorporated aspects of students' service-learning and academic experience and asked them to apply their knowledge to real settings, so that the evaluators could assess their learning, critical thinking, and cognitive development. Steinke and Fitch then determined students' stage of development through the analysis of the written protocols in relation to Perry's positions of development, from dualism to multiplicity, to commitment to relativism. Their discussion was carefully considered, as they included, not only written

protocols, but also a self-report pre-test/post-test scale (Knefelkamp and Widick's Measure of Intellectual Development [MID]), to better understand students' intellectual development and cognitive learning through service-learning. Nonetheless, Steinke and Fitch thought that the measure "does not go far enough to reflect student intellectual development fully" and, therefore, suggested that "future efforts should focus on refining the problem-solving measure and coding scheme to better assess epistemological beliefs about the nature of knowledge" (p. 188). In order for researchers to determine the foundation and nature of students' knowledge, it is also necessary to have an awareness of their identity development, as defined by Chickering and Reisser (1993).

*Chickering and Reisser's Theory of Identity Development* Chickering and Reisser's (1993) theory of identity development has provided researchers and practitioners in higher education with valuable information about college students and how they develop personally, intellectually, and socially. While this research focuses mainly on college students' intellectual development, the use of Horowitz's (1987) models of college students suggests the need for some exploration of college student development, beyond intellectual development. More specifically, the "insiders," described in more detail in the following section, tend to prioritize the social aspects of their college experience over the intellectual. While they understand the importance of their academic experience and their development as thinking and aware individuals, they are more likely to have that experience through their peers. Therefore, since Chickering and Reisser include the social and the intellectual as aspects of their theory of college student development, I will also use it to illustrate the intellectual development of college students' service-learning experience.

Chickering and Reisser's (1993) "seven vectors" enable researchers and practitioners to obtain an understanding of the way in which college students develop aspects of their identity. The seven vectors include: 1) Developing competence, 2) Managing emotions, 3) Moving through autonomy toward interdependence, 4) Developing mature interpersonal relationships, 5) establishing identity, 6) Developing purpose, and 7) Developing integrity. The first vector, developing competence, includes three areas: a) intellectual competence, b) physical and manual skills, and c) interpersonal competence. Known as the "three-tined pitchfork" because of the interrelationship of the parts, this vector provides the foundation for the others. The second vector, managing emotions, involves college students' acknowledging and responding to the emotions they face, such as anger, fear, hurt, anxiety, depression, and guilt, as they make the transition to a new setting, college. The challenge is learning to manage or balance their emotions so they can be used appropriately and effectively. Moving through autonomy towards interdependence is the third vector and the stage where students begin to trust their own opinions and take responsibility for their decisions and actions. It also includes taking into consideration the impact of those decisions and actions on others, and finding the balance between being independent and a member of a group.

The fifth vector, building on the fourth, is developing mature interpersonal relationships. This stage includes having the skills and qualities to establish intimate, healthy, and lasting relationships with others. The fifth vector, establishing identity, includes a number of parts, which rely heavily on the foundation of the previous four. These parts of establishing identity are: a) comfort with body and appearance, b) comfort with gender and sexual orientation, c) sense of self in a social, historical, and cultural context, d) clarification of self-concept through roles and lifestyle, e) sense of self in response to feedback from valued others, and f) personal

stability and integration (Chickering and Reisser, 1993). Developing purpose is the sixth vector and plays an important role in the decisions that students make about their vocation, personal life, and family life. According to Chickering and Reisser, this vector involves individuals' making and carrying out these choices and "persist[ing] despite obstacles" (p. 50). Finally, the seventh vector is developing integrity, which builds on the student's value system and is the period of time when the individual can be guided by their value system in response to ideas, events, and situations without being hindered by it.

Chickering and Reisser's (1993) theory of identity development provides an opportunity for researchers and practitioners in higher education and service-learning to apply it either as one theory or as parts of one, given its broadness and flexibility for various areas of service-learning. Researchers have incorporated many aspects of the theory and have illustrated its value for service-learning research, especially as it relates to students' out-of-classroom experience (Eyler & Giles, 1999; Jacoby, 1996; Kuh, 1995). Furthermore, Jacoby (1996) described the relevance of Chickering and Reisser's theory in relation to college students' service-learning experience. She wrote, "Service-learning, depending on how it is designed, may facilitate development in one or more vectors, but which vectors are facilitated is likely a function of the interaction of the experience with the issues a student is facing developmentally" (p. 74).

Chickering and Reisser's (1993) vectors will be studied specifically in relation to Horowitz's (1987) description of college students and their service-learning experience. Using this identity development theory will further the examination of the characteristics of students who participate in service-learning, the way in which they develop intellectually, and where they are developmentally when they participate in service-learning. In addition, an examination of their individual characteristics, including the roles of the insider, outsider, and rebel (Horowitz,

1987), will enable researchers to determine their stages of intellectual development as they relate to each student's individual characteristics, thereby obtaining a deeper understanding of cognitive and intellectual development.

Horowitz's Model of Three Groups of College Students To obtain a more thorough understanding of characteristics of students who participate in service-learning, this researcher examines three main groups of college students that have manifested in virtually every era since the 18<sup>th</sup> century, as described by Helen Horowitz (1987). These groups are insiders, outsiders, and rebels. Each group is influenced by the social, political, and academic realms throughout history, responding in unique ways to issues and events with which they are faced. Yet, at times, despite individual motivations and objectives, they form connections because of strong external forces beyond college students' typical experiences. While they maintain their individual characteristics, the groups have sometimes connected, or overlap occurred among groups when social or political issues affected their lives directly.

The *insiders*, as a group, often take the traditional role of college student, especially in the extracurricular arena. Sometimes referred to as the "Joe College" type student, members of this group generally adhere to, participate in, and perpetuate the organized structures established by the university for them. These areas include Greek organizations, sports, and other traditional campus organizations and activities. Historically, insiders valued social and extracurricular opportunities offered through college, instead of academic opportunities. According to Horowitz (1987), in the early 20<sup>th</sup> century, "presidents and deans empowered college men as the official student leaders" (p. 13). Because of the power, both economic and societal, that they brought with them to college, the administration thought it would be best to organize the insiders by

supporting them in carrying out college organizations and traditions. Nonetheless, these college men, or insiders, were and are still hostile to faculty and administration.

By contrast, the *outsiders* look to faculty as their role model and tend to be more academically motivated. Historically, this group of students included the individuals not accepted in the traditional college activities, including women, African-Americans, Native Americans, and Jews, and their participation in college was mainly devoted to academic and vocational purposes. According to Horowitz, outsiders

accepted the hard discipline of study and its stimulating challenges. They saw the classroom as the arena of combat, and sparred with each other and their professors. They connected to their teachers, perceiving them as mentors and allies, not as antagonists. (p. 15)

Outsiders sought support from faculty and were fulfilled through academic pursuits rather than social avenues because they were rarely included in the traditional college activities initiated and carried out by insiders, who enjoyed social status and financial support derived from their families.

Finally, the *rebels* challenge the established college structure, including the academic curriculum and the extra-curriculum, and promoted their uniqueness and differences from the traditional college setting. They were, simply put, nonconformists, in every way. Rebel mentality included, according to Horowitz (1987), “iconoclasm, radicalism, intellectuality, and bohemianism” (p. 16). Some rebels chose to get involved with “political fights to link questions on campus to broader national issues” and others looked not externally, but sought “inner psychic freedom” (p. 16). Rebels challenged insiders in particular and vied for control of the campus, sometimes through student government, but especially through campus publications. In



the classroom, they often questioned the choice of readings and brought up the “big picture” or philosophical questions to discuss and debate.

Before service-learning existed in its current forms, with service linked strongly with academic departments or student organizations, service to and interest in society was still an important aspect of some college students’ educational careers. The rebels, according to Horowitz (1987), are the group of students that continuously took part in challenging the “Ivory Tower” and the complacent students who were oblivious, unenlightened, or uninterested in the society of which they were a part. Horowitz stated that rebels

have raised important questions about the relation of higher education to politics, economics, society, and gender. They have insisted that the world outside the college gates come onto campus. Their courage and spunk have enlivened debate, both in class and out. (p. 292)

Rebels took action to bring college to the community and incorporate the issues of society into campus life in a variety of ways. In the early 1900s, the college rebels at Harvard argued that more attention was given to those who did not follow decorum than the children in sweatshops. In the late 1950s and early 1960s, both religious groups and “radicals” maintained their social awareness and involvement in society. Today’s rebels are likely to be involved in service-learning, especially if they initiate it and have the opportunity to develop it with a faculty member and other rebels.

While rebels traditionally addressed and developed important but evolving activist and service-based initiatives, current outsiders and insiders prefer a more structured approach to service. One could argue that, as the outsiders and insiders became increasingly focused on their academic careers and vocational pursuits, the university began to establish a structure for

service-learning activities in which both outsiders and insiders were more likely to participate in organized service activities, as opposed to the less structured forms initiated by rebels. Just as universities established sports and collegiate teams on college campuses that “channeled student violence into organized, controllable games...”, service-learning was a way for groups of students, like the insiders and outsiders, who were not likely to challenge the *status quo*, to become involved in service activities that contributed to their personal, social, and academic development (Horowitz, 1987). Today, insiders are likely to participate in service-learning through traditional student activities, including Greek organizations, student organizations, and structured campus volunteer groups. Outsiders, by contrast, are likely to participate in modern service-learning opportunities presented through the academic curriculum and encouraged by faculty.

Although Horowitz’s (1987) model of groups of college students is based in history as opposed to psychology, education, sociology, and other disciplines commonly drawn upon for college student development theories, her descriptions provide rich detail and her analysis offers innovative and valuable ideas to incorporate in other contexts. Given the historical framework, Horowitz’s research is more likely to be incorporated and utilized in other forms of historical research as opposed to development theories. Nonetheless, the depth of her research on the characteristics of students provides an opportunity to incorporate significant information about college students into Perry’s (1999) model of intellectual and ethical development and Chickering and Reisser’s (1993) theory of identity development. As a result, the conceptual framework will have depth and will be acutely relevant to today’s college students and their intellectual development and service-learning experience.

## Conceptual Framework

Despite growth of in research conducted on service-learning, existing conceptual frameworks do not provide a foundation for studies to examine the characteristics of students who participate in service-learning in relation to their intellectual development. To examine this area further, I explored various theories that would provide a foundation in which the study could be grounded and supported. Some of the theories/models considered included Barrow's (1986) model of cognitive development and King and Kitchener's (1994) reflective judgment model, though their research focused on different areas. Barrow's research provided an important foundation for defining the cognitive development of college students; yet, the application of his research focused on assessment and counseling techniques in therapy as opposed to the classroom setting. While his research is clearly valuable in defining cognitive development, the research does not sufficiently transfer to the academic setting as applied this study. In addition to Barrow, King and Kitchener's reflective judgment model provided the framework for this study on college students' intellectual development in relation to their service-learning experience. King and Kitchener's research also made important contributions in understanding cognitive development of individuals. Yet, because it is applicable to a broader population of individuals beyond college students, it may not allow for the focused attention needed to examine the nuances of college students' experience with service-learning and the way in which this group of individuals develops intellectually. Moreover, the incorporation of Horowitz's model produced a more defined developmental approach that will enable me to attend to the details of college student development through service-learning experiences.

Upon more consideration, I included the disciplines of higher education and history because of the perspective from which these fields operate and their implicit links to service-

learning. Through this exploration of theorists, three frameworks emerged and will be integrated to build upon and examine the role that service-learning has on college students' intellectual development. The models used to develop a hybrid model, illustrated in Figure 1, include: Chickering and Reisser's (1993) theory of identity development, Perry's (1999) theory of intellectual and ethical development, Horowitz's (1987) model of college student groups, and Eyler and Giles' (1999) definition of intellectual development. It also incorporated the intellectual goals of higher education, as defined by Eyler and Giles.

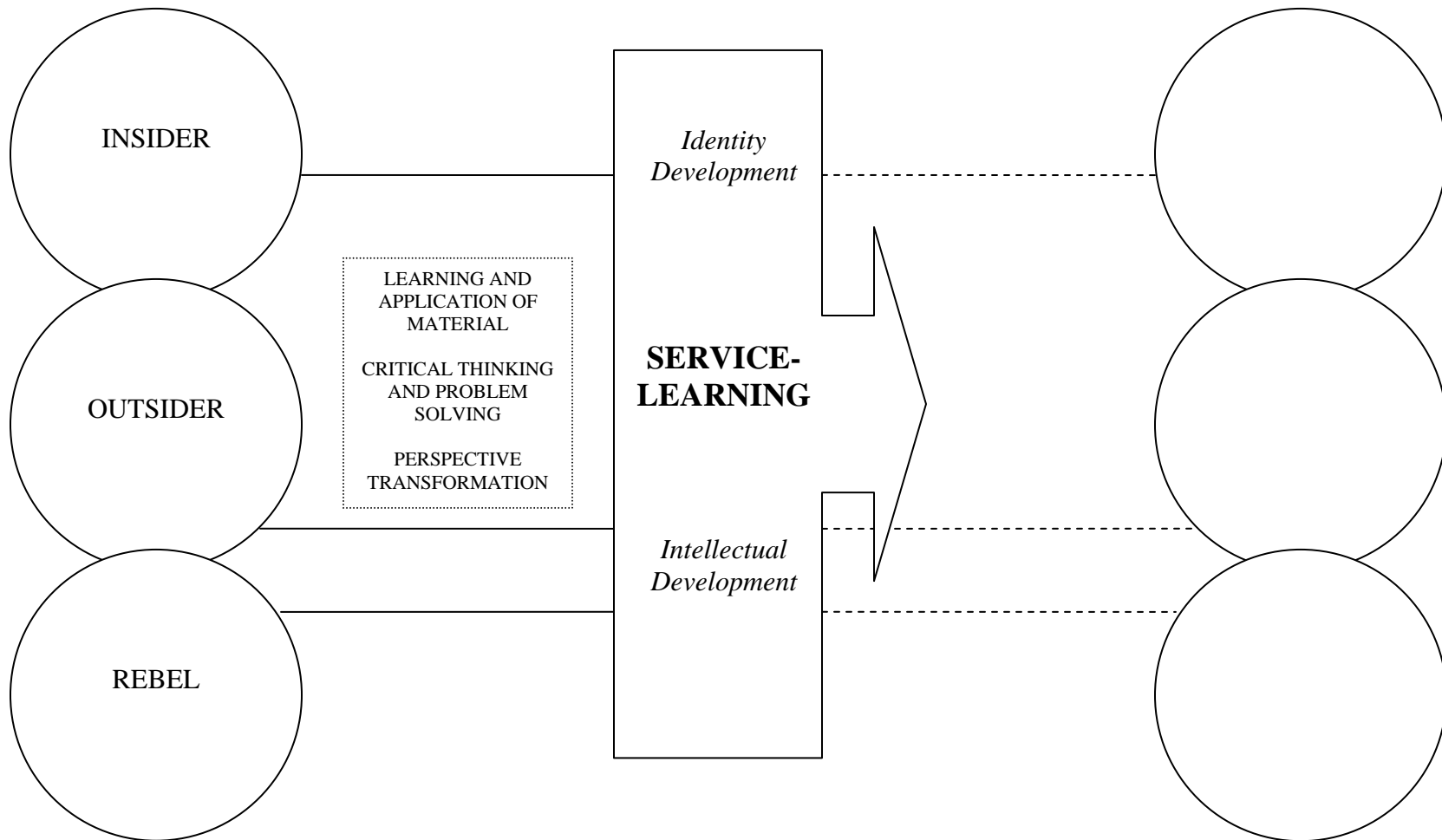
These characteristics of college students, as defined by Horowitz (1987), and the theories that are suited to a further examination of their intellectual development through service-learning, are illustrated in Figure 1. The circles on the left side of Figure 1 demonstrate the identities of each group—insiders, outsiders, and rebels—as well as their connection during the college experience. They move towards and participate in the service-learning experience, bringing their characteristics with them. The dotted box to the right of the circles includes the intellectual goals of higher education and are taken into consideration in an examination of Horowitz's groups. These components of intellectual development—learning and application of material, critical thinking and problem solving, and perspective transformation (Eyler and Giles, 1999)—are important to consider in this analysis. Doing so will enable us to better understand the ways in which each group—insiders, outsiders, and rebels—experiences these aspects of intellectual development to then explain any transformation that occurs through their service-learning experiences.

The one-sided arrow in the middle of Figure 1 illustrates the service-learning experience and the identity development and intellectual development that occurs at that time. As stated above, while each group experiences forms of both developmental patterns, the lines and

corresponding circles are closer to the predictions of the theories that they are more likely to experience. Finally, the circles on the right side of Figure 1 represent some form of the insiders, outsiders, and rebels; however, given that this research is a qualitative study, it is necessary for the interviews to be conducted and the documents analyzed, so that the themes can emerge.

# MODEL OF SERVICE-LEARNING AND COLLEGE STUDENTS

## FIGURE 1



Adapted from: Eyler and Giles, *Where's the Learning in Service-Learning?* (1999)  
 Chickering and Reisser, *Education and Identity* (1993)  
 Horowitz, H.L. *Campus Life* (1987)  
 Perry, W.G. *Forms of Ethical and Intellectual Development in the College Years* (1999)

As a means to illustrate the intellectual development of college students who have experience with service-learning, Eyler and Giles' (1999) definition provides the foundation for understanding intellectual development, as well as an important place to begin when examining these questions. Chickering and Reisser's (1993) theory of identity development and Perry's (1999) positions will further expand the conceptual framework by creating a way for the student development theories to explore any relationship among students' positions of development, their service-learning experience, and their intellectual growth.

In order to elicit information about their intellectual growth as a result of their experience, I developed questions to ask students who completed a service-learning course. Moreover, since students involved in the study will have already participated in service-learning, they will have some perspective on thoughts and thinking patterns related to issues before, during, and after their service-learning experience and the ways in which development may have occurred. This development can be explored through academic courses and textual material affiliated with the service experience, as well as through their thoughts and ideas about their practical experience and understanding of themselves and others as a result of their service.

Once these data are acquired, I will look to Eyler and Giles' (1999) intellectual goals of higher education, which include learning and application of material, critical thinking and problem solving, and perspective transformation, as exhibited in the box in Figure 1. I will then explore Perry's theory, which is displayed in the framework through the three main positions of dualism, multiplicity, relativism, and commitment (to relativism), and Chickering and Reisser's theory of identity development.

In addition to Perry's (1999) and Chickering and Reisser's (1993) theories, Horowitz's (1987) framework will enable me to explore the characteristics of individuals who participate in

service-learning and the development of the insider, outsider, and rebel. Because Horowitz shows that these groups of students were parts of the college campus since the 18<sup>th</sup> century, I assume that they can be found today in the collegiate service-learning arena. This understanding of who students are, their motivation, and their priorities will assist me in obtaining a better understanding of the way in which their intellectual growth occurs, whether it will be depicted through their peers (insiders), their faculty (outsiders), or their own exploration (rebels). This structure, in tandem with Perry's model of intellectual and ethical development, Chickering and Reisser's theory of identity development, and Eyler and Giles' (1999) definition of intellectual development and Eyler and Giles's definition of intellectual goals will help me to explore the way in which students develop through service-learning experiences. The research conducted on students' intellectual development and their service-learning experience requires a conceptual framework which will illustrate the characteristics that students possess in relation to their development; therefore, the research of Perry, Chickering and Reisser, Horowitz, and Eyler and Giles will be needed to establish a foundation for this study.

Horowitz's (1987) model, used in conjunction with Perry's (1999), provides a multifaceted conceptual framework which explains students' roles in college and their position of intellectual development during and after their service-learning experience (Figure 1). The framework displays the students' different natures and their corresponding development, recognizing that one cannot assume that all college students will grow and learn in the same ways. Therefore, each "type" of student – insider, outsider, and rebel – has its own positions (illustrated through the circles) because it will be necessary to explore students' development and acknowledge the range of students, as opposed to assuming that there is only one type. Moreover, while the insider, outsider, and rebel are likely to experience stages of development



described by both Perry and Chickering and Reisser, researchers and practitioners are more likely to see certain groups linked with certain developmental theories.

When studying the insiders, it is important to note the priorities of their college experience, their individual development, and their reliance on older peers for support as opposed to the administration or faculty. Horowitz described the insiders in the 1960s as follows:

The college took pains to select bright, capable, and highly motivated students and tried to socialize them into faculty standards, only to see them turn away from their studies to value well-roundedness in sports and extracurricular activities...they directed their gaze upward to those older students willing and able to guide them. (p. 122-123)

Horowitz showed convincingly that these insiders are a part of the college setting in modern times. Because of their attention to the whole college experience, including coursework, student organizations and undergraduate societies, and fraternities and sororities, it is most suitable to connect the insiders with Chickering and Reisser's theory of identity development. Their intellectual development is more likely to be depicted through and in relation to their peer group and status outside the traditional college classroom.

The outsiders' and rebels' intellectual development, given their distinctive characteristics, would be better associated with Perry's (1999) theory of intellectual development. The outsiders, according to Horowitz (1987), focused on their career and academic aspirations and "became infatuated with the content of what they were studying" (p. 14). Because outsiders valued the offerings of the curriculum and the support of faculty, their focus is closely related to their academic learning, which would be appropriately linked with the exploration of their development as defined by Perry. Horowitz's rebels would also be interesting to examine further with the framework of Perry's theory of intellectual development. Rebels, according to

Horowitz, “demanded the content, not the form, and identified keenly with artist and writers breaking conventions and with the few iconoclastic professors moving into the academy” (p. 16). Because of their attention and value placed on ideas, intellectual curiosity, and challenging the administration, rebels’ thought processes would also be ideally linked with Perry’s theory of intellectual development.

This conceptual framework provides a strong yet open-ended foundation to begin conducting research on college students’ service-learning experience and their intellectual development. Throughout the process of identifying the theories that would ground this study, it was necessary to examine the characteristics of students who participate in service-learning in relation to their intellectual development. The framework used here allows for identifying students’ ideas, perspectives, and world views in addition to the way they think, perceive, and formulate ideas, all of which shape students’ intellectual development. To focus on the characteristics of students who become involved in service-learning is clearly important. That said, doing so on its own is both too broad and fails to ground the study sufficiently. Studied separately, the characteristics may lead the researcher to a variety of areas, including personal development, social development, or social responsibility, but not necessarily to intellectual development, which is the priority of this study.

Moreover, analyzing only theories on intellectual development does not enable the framework to frame the purpose of the research, which includes an investigation of those students who participate in service-learning as individuals, as well as the ways in which they grow intellectually. Because one type of student may exhibit characteristics of growth and development that different from those shown by another student, it is necessary to have an understanding of various types of students and the ways in which they may demonstrate that

development. For instance, one student's development may be exemplified through his or her increased involvement or engagement with the faculty, another student may focus on the way in which he or she has been changed individually by the experience, while another student's progression from one stage to another may occur through work with peers. For this reason, this research on students' service-learning experience in relation to their intellectual development must include Horowitz's description of college students' characteristics and their intellectual development.

### Conclusion

With more extensive knowledge of the literature related to service-learning and both student learning and intellectual development, I will be better able to incorporate existing literature and to examine areas that require elaboration. The historical study of service-learning is one of the key areas for this study because of the evolution of service and service-learning, our changing society, and the diversity of college students. In addition, the examination of academic achievement and cognitive development allows for a more complete understanding of the way in which intellectual development occurs in relation to course work. Examining the relationship between intellectual development and cognitive development is also critical to this study as a result. Since, according to Barrow (1986), intellect is a part, or aspect, of cognitive development, we must define intellectual development more specifically. Based on the research of Eyler and Giles (1999), I was able to employ a definition of intellectual development that includes learning and application of material, critical thinking and problem solving, and perspective transformation.

The study of the literature related to service-learning and intellectual development permits a more complete understanding of the research problem and the way in which the

research should be pursued. For instance, exploring the way in which students develop intellectually through service-learning requires an understanding of the research on course related service-learning, the impact on students' academic experience, developmental and historical theories, and college students' intellect. The use of all of these literatures provided this researcher with that understanding and clarified important terms, such as "intellectual" and "cognitive development," and helped to determine the most inclusive yet concise definition of intellectual development. The literature also enabled me to understand that college students may experience intellectual development in a variety of ways, a fact which was evident through the use of Horowitz's work, yet became clearer with the incorporation of both Chickering and Reisser's (1993) and Perry's (1999) theories. The literature presented in this chapter allowed for a more complete understanding of the research problem and the way in which this study should be pursued.

## **CHAPTER III**

### **METHODOLOGY**

#### Introduction

While significant attention has been placed on service-learning in the university setting, the research conducted has focused on college students' personal or individual development (Kuh, 1995; Rhoads, 1997, 1998), their changing attitudes and multicultural perspectives (Billig & Furco, 2002), or their degree of civic engagement (Battistoni, 1997; Rhoads, 1997, 1998). Researchers have also begun to examine students as citizens of the world or agents of social change through their involvement with service-learning (Cunningham & Kingma-Kiefhofer, 2004; Lewis, 2004). Some researchers have focused on students' service-learning experience, their cognitive development, and their critical thinking skills (Eyler & Giles, 1999). Yet, there is a need for more analysis of college students' service-learning experience with respect to how different types of college students develop intellectually.

In this chapter, I will present the methodology for this study to explain the way in which the research was conducted, defend the rationale for qualitative research, and describe the process of data collection and analysis.

#### Research Questions

The primary research question for this study was:

- How do college students develop intellectually through service-learning?

The subquestions for this study were:

- How does service-learning enhance college students' understanding of their intellectual development?

- How do college students articulate their understanding of intellectual development?
- How do college students perceive themselves as having developed intellectually, including application of material, development of critical thinking and problem solving, and changes in their perspective?
- How have college students across Horowitz's categories been transformed intellectually through their service-learning experiences?

### Rationale for a Qualitative Design

Since there is not a significant amount of research on service-learning in relation to students' intellectual development and their individual characteristics, it is appropriate to begin with a qualitative study. A qualitative study enabled the researcher to interpret the data and analyze the information for trends or themes (Creswell, 2002). The qualitative method, being more broadly based and open-ended (Creswell, 2002), allowed the researcher to study students' experiences in service-learning and explore any impact that their service has on their intellectual development. This study used the basic interpretive qualitative study, which, as defined by Merriam (1998), "seeks to discover and understand a phenomenon, a process, the perspectives and worldviews of the people involved" (p. 6). By using the basic interpretive qualitative design, the study explored the ways in which students viewed the academic material in class and their understanding of material from different or additional perspectives through their service-learning experience. Through in-depth interviews and document analysis and with the support of a peer debriefer, I examined the relationship between service-learning and students' intellectual growth. Finally, because service-learning research related to students' intellectual development has remained underdeveloped in the field of higher education, this study enabled this researcher,

other researchers, and practitioners to have a better understanding and knowledge of the general themes that emerge, thus providing them with information and direction regarding implementation and further research.

### Role of the Researcher

According to Merriam (1998), “In a qualitative study, the investigator is the primary instrument for gathering and analyzing data and, as such can respond to the situation by maximizing opportunities for collecting and producing meaningful information” (p. 20). Since the researcher is the primary instrument, he or she has significant responsibility for ensuring that the data collected through interviews, observations, and documents are presented in a complete and ethical manner. Biases, or “subjective Is,” according to Peshkin (1988), are addressed by the researcher, including biases about service-learning, students who chose to participate, and the impact that it had on their development.

In my research on service-learning and college students’ perceptions of their intellectual development, my biases centered on two assumptions: 1) there is a relationship between service-learning and intellectual development, and 2) service-learning experiences are generally positive and contribute to students’ intellectual development. In addition, my role as a professional staff member at a university could have affected my role as a researcher. Yet, an awareness of these biases enabled me to take the steps to undertake a valid study by addressing these biases and understanding and explaining the way in which they affect my conclusions (Maxwell, 2005). This point is critical, and one that researchers should keep in the forefront of their minds as they establish their trustworthiness for the participants with whom they work, their colleagues in the discipline, and the field of which they are a part.

With respect to this study on service-learning, my biases also related to the types of students who participated. Because service-learning has historically been strongly incorporated in the social sciences, I tended to focus on those students, and their particular academic disciplines, as potential interviewees that would provide me with substantial descriptions of their service-learning experiences. Having an awareness and understanding of these biases enabled me to recognize the impact they have on me as I chose students to interview and collected and analyzed the data. By attending to those biases, I was able to put them aside and focus dispassionately on the variety of students who participate in service-learning, the data that were collected, and the themes that emerged. Furthermore, through document analysis and rich description and with the support of a peer debriefer, these biases were minimized.

#### Ethical Considerations

Ethical issues are critical to the study because, according to Merriam (1998), “ensuring validity and reliability in qualitative research involves conducting the investigation in an ethical manner” (p. 198). While ethical issues related to the interviews and the observations were critical to the study, these issues were also strongly connected to its credibility. In order to ensure the validity of the study, I gathered information from various sources (student interviews and some faculty perspectives through the contacts I make when seeking students to interview), analyzed documents, and obtained feedback from a colleague through peer examination of the data gathered and the analysis of those data (Merriam, 1998). Furthermore, in order to achieve reliability for the study, I employed the aforementioned techniques and used an audit trail, which provided a description of the data collection and analysis (Merriam, 1998). I also used rich description of the college students and their perspectives on their intellectual development throughout the study as a means to ensure data reliability (Maxwell, 2005).



Other issues related to ethical considerations included the type of information the students revealed, the effect that talking about his or her experience may have had on him or her, as well as the need to ensure anonymity of the students who chose to participate. Although the nature of this study relates to students' service-learning experience and their views of their intellectual development, some of the service experiences they had prompted some emotions in relation to Hurricane Katrina. According to Merriam (1998), in her analysis of the ethics of data collection, "Patton and others recommend being able to make referrals to resources for assistance in dealing with problems that may surface during an interview" (p. 214). To be prepared for this, I included a statement in the permission form (see Appendix C) which recognized that some emotions may arise when students talk about their experience, and that I had at my disposal information about their respective institutions' counseling services to provide to the students, if such was warranted.

### Validity

As a means combat threats to validity, one must use a variety of strategies appropriate to the study (Lincoln and Guba, 1985; Maxwell, 2005). After reviewing the validity checklist described by Maxwell, recommendations made by Lincoln and Guba, and considering the nature of the research, I used the following methods to achieve validity: the use of a peer debriefer and the use of rich data increased the validity of the study of college students' experiences with service-learning and their intellectual development.

The use of a peer debriefer adds to the credibility of the study according to Glesne (1999), Lincoln and Guba (1985). According to Lincoln and Guba, peer debriefing "is the process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit

within the inquirer's mind" (p. 308). I asked a colleague who is an experienced qualitative researcher and has experience working with undergraduate students who participate in service-learning to be a peer debriefer for my study. He provided valuable feedback, especially during the time I analyzed the interview transcripts, decided on the main issues of the college students' intellectual development through their service-learning experience, and began to develop themes. I presented the peer debriefer with summaries of my analysis and themes at various times throughout this process, and he provided me with relevant feedback about any issues I had not noticed in the interviews related to my research questions and confirmed ideas I developed, which eventually generated into the themes. In addition to providing feedback on the data and the themes, this peer debriefer also served as a reminder me of my biases and enabled me to consider information in the interviews that I might have not regarded as valuable to the research questions.

Also, as an experienced writer, I have the skills to provide extensive details, depict images, and illustrate students' perceptions of their intellectual development through service-learning. Through the interviews, rich details included information about the students' service-learning experience, the service that they carried out, their thoughts and ideas about the experience, as well as their perceptions about the relationship of service-learning to their academic coursework and their intellectual development.

### The Question of Generalizability in Qualitative Research

In addition to establishing validity through the methods described, I also was expected to address generalizability, specifically "internal generalizability" (Maxwell, 2005). According to Maxwell, "the descriptive, interpretive, and theoretical validity of the conclusions of a case study all depend on their internal generalizability to the case as a whole" (p. 115). Although this study

is not a case study, I worked towards internal generalizability by exploring the students' responses and perceptions of their intellectual development in relation to one another. While they did not necessarily compare to one another, it was important to assess responses that may be different, yet not completely distinct from one another. The student interviews were explored in the context of course goals and discussions in the classroom. They were also examined in relation to Perry's (1999) theory, Chickering and Reisser's (1993) theory, Horowitz's (1987) characteristics of college students, and Eyler and Giles' (1999) definition of the intellectual goals of higher education. This method of in-depth examination paralleled the explanation used by Merriam (1998), who quoted Patton (1990) as stating that qualitative research should "provide perspective rather than truth, empirical assessment of local decision makers' theories of action rather than generation and verification of universal theories, and context-bound extrapolations rather than generalizations" (Patton, quoted by Merriam, p. 209). Through the use of qualitative methods, researchers can examine ideas in a new way, as a means to seek new perspectives, new thoughts, and different ways of knowing.

Through these methods, I was able to explore the ideas presented, and yet to work within the framework of the actual setting of the service-learning environment, the classroom setting, and existing theoretical frameworks. By addressing validity and generalizability in these ways, the study not only had a strong foundation of data, the data were analyzed in a way that will enable a full explanation of the ideas related to service-learning and college students' intellectual development in a manner that is trustworthy and credible.

### Pilot Study

I conducted a pilot study on service-learning and college students' intellectual development during the Summer of 2006 in order to gain experience in the process of conducting

research in relation to students' service-learning experience. The pilot study enabled me to examine the characteristics of college students, as defined by Horowitz (1987), and their intellectual development, as defined by Perry (1999), through service-learning. The research provided evidence that understanding individual characteristics of college students in relation to their intellectual development is an important aspect of the interpretation of the data. Moreover, the research also enabled me to explore the definitions of cognitive development, intellectual development, critical thinking, and other terms used by previous researchers to describe this type of development college students experience through service-learning. Ultimately, the pilot study confirmed that this area is an important aspect of service-learning to study, in part because previous research had not fully defined the individuality of college students, nor did it specifically define intellectual development in relation to service-learning.

As a means to explore college students' intellectual development through their service-learning experience, four undergraduate students who had enrolled in an academic course with a service-learning component were interviewed. All of the students were upper-division students and were currently enrolled at a four-year, public, research-intensive university in the southeast. Through the interviews with these students, I was able to provide a detailed description of the students, using Horowitz's (1987) characteristics. This description provided a more in-depth analysis of the positions of the students' intellectual development. Through data analysis, the following themes emerged, which were organized by students' past thoughts on their experience, current notions about service-learning, and future ideas of their goals. In the first section (past thoughts on their experiences), students described clarity in terms of the objectives of the service-learning course and their role in it, preconceived ideas challenged because of service-

learning, and the value shift from working for certain grades to learning for the sake of knowledge.

The second category of themes (current notions about service-learning) included students' increased awareness of real life and the academy, shifts in thinking, and the role of faculty involvement or lack thereof with the service-learning experience. The third category (future ideas of their goals) was comprised of the students' observations a semester or year after the service-learning course relating to their intellectual aspirations beyond the classroom and the university. The students described their new perspective on education, the community, and themselves after the service-learning experience. In addition, they became increasingly aware of the real world and its real problems, the importance of communication among faculty, the community, and service-learning students, and their motivation to expand their intellectual growth further. The pilot study enabled me to have a better understanding of the kinds of research questions I should ask and further clarified students' characteristics and identities. Most importantly, it provided me with data to define intellectual development of college students more closely.

Because of the pilot study, I made some changes to my study on service-learning and college students' intellectual development. While the primary research question remained the same, the subquestions were adjusted to reflect the purpose of the study more accurately. Also, based on the students' responses to the questions and their descriptions of the way in which their thinking changed, I was better able to define intellectual development, specifically with the research of Eyler and Giles (1999). Many aspects of Eyler and Giles' description of the intellectual goals of higher education seemed to reflect the students' responses during the pilot study. Finally, the interview protocol was also changed from the pilot study's and included

questions that more accurately define intellectual development. As a result, participants in this study were presented with specific questions about their perceptions of their intellectual development through their service-learning experience. These changes based on the pilot study enabled me to improve upon the structure and organization of this study, as well as to suggest possible answers to the research questions and subquestions.

### Selection of Students

This study on service-learning explored college students' intellectual development. I gathered data through interviews of twelve upper-division students who participated in a course related service-learning program at two four-year, private universities. One institution was a Master's level, historically Black college with a religious affiliation that does not require service-learning for graduation. The second institution was a research-extensive university that requires service-learning for graduation. These types of institutions also had service as a component in the missions and goals of the education for their students; it was a part of the campus culture and, with the rise of service-learning in higher education, these colleges expanded their current service initiatives into well-developed service-learning departments. Moreover, the number of students selected allowed me to obtain a significant amount of information about students' experiences. In this context, Merriam (1998) stated, "in qualitative research, a single case or small nonrandom sample is selected precisely because the researcher wishes to understand the *particular* in-depth, not to find out what is generally true of the *many*" (p. 208) [emphasis added]. Two different institutional types, as categorized by the Carnegie classification, were selected for the following reasons. First, a Master's level institution was selected because of the value placed on teaching and the educational experience of undergraduate students. Second, this

research-extensive institution was chosen because of its medium size and its service-learning requirement for graduation.

In order to gain access to undergraduate students, I contacted the service-learning/public service departments at each university. Since an increasing number of colleges and universities are incorporating service-learning in the classroom and even requiring it as a part of the requirements for graduation, there are departments on college campuses that provide significant support for students and faculty who are involved with service-learning. I first emailed the directors of these service-learning departments, explained the study, and set up a meeting with them to discuss the study in more depth. In this meeting, I described the students that I was interested in interviewing and asked the directors to recommend students who would meet the criteria (upper-division students who have completed a course related service-learning course), as well as obtained their contact information. Because I was also interested in getting students who were characteristic of Horowitz's (1987) groups of college students, I asked the service-learning directors to recommend students with different traits and priorities. For instance, I requested that they recommend students involved in Greek affairs and university student government (insiders), students who were engaged intellectually, with faculty, and valued their academic experience (outsiders), and students who were involved with the community individually, initiated their own projects, or challenged institutional policies (rebels). Once these students' names were sent to me, I emailed the students with a description of the study. In the email, I also asked about their interest in participating in the study so that they would be able to share their experience and their ideas about their intellectual development. After this preliminary email, I called the students to discuss the study and their participation further.

In addition to getting the names of students from the directors of the service-learning departments, I asked the directors for names of faculty members who have taught service-learning courses for two reasons: 1) to recommend students to interview, and 2) to obtain copies of their course syllabi and any other material from the course or service site. I then contacted the professors via email, explained the study, and asked them for a copy of their syllabi from the service-learning courses. It is here that I was able to access more information about the course expectations, the role of service-learning, and some of the professors' perceptions about the course and the students who enrolled and participated. Using the additional information from the professors about the service-learning expectations in the course, I decided if the course had a service-learning component significant enough for students to have had an experience that they would be able to discuss in detail. Also, if the faculty offered to email my invitation to the students in their course to encourage them to participate, as some did in the pilot study, I accepted that offer, because students were more likely to respond to their professor than to someone whom they do not know. After interested students responded, I telephoned them in order to discuss their service-learning experience generally, to give them more information about the study, and to set up a day and time for the interview. In recognition of the support offered by the faculty and the directors of the service-learning departments, I will provide them with a summary of the study's findings, so that they can use the information as they see fit in their service-learning courses and programs.

#### Pre-Interview Process

Before the interviews began, I explained the study (see Appendix D) and the consent form (see Appendix F) in detail. I asked the student if he or she has any questions, and, if not, we proceeded to signing the consent form, completing the data sheet (see Appendix E), and



conducting the interview using the protocol (see Appendix G). The interviews were transcribed verbatim and the analysis, although generally an on-going process, began with the themes that emerged (Creswell, 2002). I also included field notes during and after every interview and wrote down any compelling aspects of the interview, as well as a description of the student and any characteristics of interest.

### The Interview

As a means to gather information from the college students about their service-learning experience, I asked the questions in Appendix G. The protocol was developed by considering the importance of eliciting college students' perceptions of their intellectual development following their service-learning experience. The students were asked to draw upon their service-learning experience and to discuss some of the most significant aspects of their experience in relation to their intellectual development. In view of the purpose of this study, the interview protocol was organized in the form of a synchronic report. According to Weiss' (1994) research on interview studies, synchronic reports are an

attempt to achieve coherence without the armature of time. Generally, they do so by dividing whatever they are about into its significant sectors and moving into logical sequence from sector to sector....Contributing to the coherence of synchronic reports can be themes of patterns that underlie developments in every section. (p. 44)

Therefore, in this study, instead of asking questions to bring out information chronologically, I asked questions about the most important aspects of the students' service-learning experience, their perceptions of their intellectual development, and their ideas about their individual characteristics in relation to it. The relationship among these responses was organized by themes,

emphasizing the students' perceptions of the most significant information as opposed to the sequence in which events occurred.

The interview protocol began with experience/behavior questions that are often simple for students to answer, thereby providing an opportunity for them to feel comfortable and give significant information (Patton, 1990). The questions then became more specific, so that students can give information about their perceptions of their intellectual development and their identities as college students.

With the help of the directors of the service-learning departments, I was able to secure space on their campuses to make it easier for the students to participate in the study. The interview lasted between 1 hour and 1 hour and 15 minutes. The questions (see Appendix G) enabled me to gather data relevant to the research questions of college students' service-learning experiences and their intellectual development.

### Data Analysis

The analysis of the data was an interesting, yet complex process. After transcribing and reading the transcripts multiple times, I began to develop codes and to organize them into themes (Creswell, 2002). I also developed four separate, but interrelated matrices, to further organize the themes that emerged, the theories of Chickering and Reisser (1993) and Perry (1999), and Horowitz's (1987) groups of college students. The four matrices included: 1) a matrix on general themes that emerged, 2) a matrix to determine the groups (Horowitz, 1987) each of the students paralleled based on their observations of their service-learning experiences and college experience in general, 3) a matrix to identify Perry's position of development and where the outsiders and rebels were likely to be based on the information they provided, and 4) a matrix to identify Chickering and Reisser's stages of development and where the insiders were likely to be

based on the information they provided. With these matrices developed, I was better able to highlight the relationship and differences of the themes, as well as to make connections between the themes and the literature on service-learning, intellectual development, and characteristics of college students. I also began to examine major themes related to students' changing perceptions, their ideas about the roles of their professors, their grades and their learning, and the experiences related to "real" life and the university. At the same time, I was open to the students' perceptions of the way in which they thought that they changed, as well as other themes that emerged, which provided valuable information when examining their stages or positions of intellectual or identity development.

In this context, in relation to the reliability of qualitative research and analyzing data, Merriam (1998) explained, "Qualitative research...is not conducted so that the laws of human behavior can be isolated. Rather, researchers seek to describe and explain the world as those in the world experience it" (p. 205). The students interviewed about their service-learning experience were able to offer significant information about their service experience, their course work, and their perceptions of their intellectual development, shifts in thinking, and changes in their perspectives. Through their experiences, the students portrayed their thoughts and ideas as a means for others to understand the viewpoints of college students who have participated in service-learning and their ideas about their intellectual development.

In addition to the interviews, I conducted document analysis by reviewing course syllabi for service-learning courses. This material provided the course requirements as well as the faculty members' expectations for the service-learning experience, from the service requirements to the "academic" requirements. Having this information complemented the data collected from the interviews, because it provided another perspective on the students' expected service-

learning experience. This form of document analysis also provided valuable information that could be correlated to students' intellectual development because of the direct connection to the academic course.

### Delimitations and Limitations

According to Charles and Mertler (2002), delimitations of a study “are the boundaries purposefully put on [it]” (p. 71). In this study on college students' intellectual development and service-learning, the “delimitations” included interviewing twelve upper division students at two four-year, private universities. The students in the study had completed their course service-learning program.

According to Charles and Mertler (2002), limitations of a study “refer to conditions outside the investigator's control that affect data collection” (p. 71). In this study, limitations included the college students who were referred to me by the service-learning department directors. As course-related service-learning programs become more integral parts of the traditional college setting, students willing to share their experiences may take on more traditional college leadership roles, such as was the case with insiders, as defined by Horowitz (1987). To obtain a greater diversity of students, I talked to the directors in detail about the various types of students, so that they could recommend students in different majors, as well as students involved in campus activities and faculty mentorship in varying degrees. In addition, the limitations posed by the sites presented a variety of issues. First, the Master's level, historically Black, religiously affiliated college incorporated service in the mission of the institution. This aspect of the mission and the college's religious affiliation might predispose students to be interested in service and see it as part of their responsibility as a member of the campus community and larger community. To address this limitation, I focused on students' perceptions

of their intellectual development and the course expectations. If themes about their values and value system emerge, they were linked to the way in which students' thinking changed or shifted, thereby connecting it to their intellectual development.

## **CHAPTER IV**

### **RESULTS**

The purposes of this study were to explore how college students develop intellectually after a service-learning course and to describe their perceptions of that development. This study also sought better to understand the characteristics of college students, as defined by Horowitz (1987), in relation to their service-learning experience and intellectual development, thereby providing a unique examination of the study of service-learning. To work towards these goals, the study was conducted using the following research questions as a framework.

#### Research Questions

The primary research question for this study was:

- How do college students develop intellectually through service-learning?

The subquestions for this study were:

- How does service-learning enhance college students' understanding of their intellectual development?
- How do college students articulate their understanding of their intellectual development?
- How do college students perceive themselves as having developed intellectually, including application of material, development of critical thinking and problem solving, and changes in their perspective?
- How have college students across Horowitz's categories been transformed intellectually through their service-learning experiences?

## Introduction

As a means to examine college students' intellectual development through their service-learning experience, interviews were conducted with twelve students from two different institutions, one that required service-learning for graduation and one that did not. At the time of the interviews, all students had completed a service-learning course and were interested in talking about their experiences. The analysis of the interviews was guided by the conceptual framework, which was used to explore college students' intellectual development through their service-learning experience. The framework enabled this researcher to generate and organize general themes related to intellectual development that emerged from the interviews. In addition, it allowed for a more thorough understanding of additional themes connected with Eyler and Giles' (1999) definition of the intellectual goals of higher education, positions of college student development based on Chickering and Reisser's (1993) and Perry's (1999) theories, and characteristics of college students who participated in service-learning as developed by Horowitz (1987). From the analysis of themes and discussion of the characteristics of college students in relation to their service-learning experience, this study demonstrates the importance of factoring in college students' group characteristics in order better to understand their intellectual development.

This chapter is organized in five main sections and discusses the findings in the following ways. First, I provide a general overview of the chapter with descriptive findings, highlighting the important areas of the study and giving a contextual framework for more detailed analysis in the second and third sections. Second, I include a description of the participants and the service-learning course that they completed and details the three categories of college students—insiders, outsiders, and rebels—and the way in which the students interviewed illustrate the groups'

characteristics. Third, Eyler and Giles' (1999) definition of the intellectual goals of higher education is examined in relation to the students to portray both the value and limitations of their definition. Fourth, the five general themes of students' perceptions of their intellectual development through their service-learning experience that emerged from the interviews are presented. Fifth and finally, the transformation of insiders, outsiders, and rebels are examined in detail, in relation to Perry's (1999) theories, Chickering and Reisser's (1993) theories, and the themes, providing a new analysis of the way in which each of Horowitz's established categories is transformed through a service-learning experience.

### General Overview and Descriptive Findings

From the interviews, the analyzed data demonstrate that the students possess a range of understanding and articulation of their intellectual development associated with the incorporation of service in the academic course and the expectations and requirements for the course in relation to service. Many college students interviewed described ways in which they questioned perceived authorities or experts, such as professors and other researchers, media sources, university administrators, and even values taught to them by family. Also, they often demonstrated that their communication skills, discussed by Eyler and Giles (1999), were enhanced or changed to adapt to a variety of audiences, an area of communication skills not commonly discussed in the literature on service-learning; this development had not often occurred with students before the service-learning experience. This shift demonstrates significant change in their thinking, not only of the way others viewed them, but also of the way they viewed themselves.

In addition, students were able to better understand other people's perspectives more clearly and thoroughly with the experience of the service-learning course, suggesting shifts in



previously held beliefs or understandings of what is real or true. This shift demonstrates significant change in their thinking, more nuanced and complex. Moreover, some college students explained situations where “solutions” to problems generated more questions. Finally, the students interviewed described the problems they faced and the way in which those challenges shaped their understanding of the realities of the environment in which they served; their ability to consider individual experiences as well as global understandings of the issues was also significantly changed.

The analyses of the data also integrated frameworks developed by other researchers, which were adapted for service-learning, in order to enhance the understanding of college students’ intellectual development. First, Eyler and Giles’ (1999) definition of college students’ intellectual goals in relation to service-learning was used to better understand various types of students’ experiences. Their framework, which many of the students interviewed demonstrated in their explanation of their service-learning experience, included learning and application of material, critical thinking and problem solving, and perspective transformation (Eyler and Giles, 1999). By using this definition, this researcher was able to see the areas that some college students addressed, did not address at all, or addressed only in part. From this point, I could determine what areas of college student development should be examined in more detail by taking into consideration the characteristics of students, as defined by Horowitz (1987).

Second, Perry’s (1999) and Chickering and Reisser’s (1993) developmental theories illustrated the developmental position of each student was in based on their discussion of their service-learning experience; I linked the students with either Perry’s or Chickering and Reisser’s theories depending upon their characteristics as defined by Horowitz (1987). Therefore, outsiders and rebels were studied in relation to Perry’s theory of intellectual and ethical development and

insiders were examined in relation to Chickering and Reisser's theory of identity development. The outsiders and rebels fell in two positions of intellectual and ethical development as defined by Perry, which included "multiplicity" and "relativism." Also, though some students remained in one position, there was evidence of movement towards the next position of development. The insiders also ranged in their stages of development according to Chickering and Reisser's model. Some students expressed themselves in ways which gave evidence for the completion of stages, which included developing competence, moving through autonomy towards interdependence, developing purpose, and the even more developed position of developing integrity. Many of the college students' service-learning courses not only facilitated their intellectual and identity development because of the variety of experience, the courses also provided concrete examples where students could describe the points at which they recognized their own development. Nonetheless, some students focused more on the development of other students and were rarely descriptive in discussing their own intellectual growth.

Third, Horowitz's (1987) historical analysis of college students was used to give complexity and depth to college students' intellectual development through their service-learning experience. Based on the interviews with these students and the information they provided about their particular interest in service-learning, I found that all three groups were represented fairly evenly. There were four insiders, five outsiders, and three rebels. Studying these college students using Horowitz's framework will expand the literature on service-learning to include a new interpretation of the way in which they develop intellectually and the process by which these groups of students develop through the service-learning experience. This chapter thus layers college-student development theories and an historical analysis of categories of college

students in order to develop a new and unique understanding of service-learning and college students' intellectual development.

### Participants

Twelve upper-division college students who completed a service-learning course were interviewed about their service-learning experience and their perceptions of their intellectual development. The students were from two different universities. The first university, a historically Black, religiously affiliated, Master's level university located in an urban area in the southeast region, will be known as "Teaching University." Six students were interviewed from Teaching University, which does not require service-learning for graduation. The second university, a research-extensive, private university in an urban area in the southeast, will be known as Research University. Six students from Research University were interviewed, and the institution requires service-learning for graduation.

#### *Brief Descriptive Overview of Participants*

The participants are described in a number of ways to illustrate where they are in their academic career and to provide basic information about their service-learning experience. A description of the students is illustrated in two tables, each of which includes the student's age, year, major, the service-learning course, the service, and the characteristic, defined by Horowitz (1987), that each college student represents (see Tables 1 and 2).

**TABLE 1**  
*Teaching University*

<b>NAME</b>	<b>GROUP</b>	<b>MAJOR</b>	<b>YEAR</b>	<b>SERVICE-LEARNING COURSE</b>	<b>SERVICE</b>	<b>INTEGRATED SERVICE AND LEARNING (YES/NO)</b>
Kristen	Rebel	Mass Communications	Senior	Public Speaking	Conducted interviews	Yes
Rachelle	Outsider	Education	Senior	Teaching Reading Methods	Tutored	Yes
Beth	Outsider	Biology	Senior	Public Speaking	Conducted interviews	Yes
Zelda	Outsider	Psychology	Junior	English (Gender Studies)	Spoke to/Mentored high school students	Yes
Todd	Insider	Pharmacy	Senior	Pharmacy	Spoke to/Mentored high school students	No
Melissa	Insider	Pharmacy	Senior	Pharmacy	Spoke to/Mentored high school students	No

**TABLE 2**  
*Research University*

<b>NAME</b>	<b>GROUP</b>	<b>MAJOR</b>	<b>YEAR</b>	<b>SERVICE-LEARNING COURSE</b>	<b>SERVICE</b>	<b>INTEGRATED SERVICE AND LEARNING (YES/NO)</b>
Kelly	Rebel	English	Junior	English (Gender Studies)	Rebuilt part of house	Yes
James	Insider	Psychology	Senior	Political Economy	Co-facilitated service-learning	Yes
Ellen	Outsider	Math and Economics	Senior	Environmental Sociology	Collected data	No
Sarah	Outsider	History and International Development	Junior	English (Gender Studies)	Rebuilt part of house	Yes
Robert	Insider	Architecture	Junior	Historical Architecture/Survey	Collected data	No
Corinne	Rebel	Political Science and Sociology	Senior	International Development (Latin American Studies)	Translated for immigrant detainees	Yes

Students at Teaching University are described in Table 1, and students at Research University are described in Table 2. The tables also include whether or not service was significantly incorporated in the service-learning course based on the description the students provided of their service-learning experience. This area is of importance because based on the research of Eyler and Giles (1999), college students' intellectual development is strongly linked with the integration of service in the service-learning course.

In addition to the tables, a slightly more detailed description is in the following section and provides information about the participants' service-learning courses and the type of service they completed.

The following students attend Teaching University:

Kristen is a 20 year-old senior majoring in mass communications. The service-learning course she completed was a public speaking course where students were required to interview nursing home residents about their experience with Hurricane Katrina. Kristen is a rebel.

Rachelle is majoring in elementary education and is a 22 year-old senior. Her service-learning class was on teaching reading methods, and she helped 2<sup>nd</sup> grade students develop strategies to improve their reading. Rachelle is an outsider.

Beth, a 21 year-old senior who is majoring in biology, completed the same service-learning course as Kristen. Beth enrolled in the public speaking course where students were required to interview nursing home residents about their experience with Hurricane Katrina. Beth is an outsider.

Zelda is a 19 year-old junior majoring in psychology. The service-learning class she enrolled in was an English/gender studies course, and the service for that course involved

teaching high school students about gender, as well as college, scholarships, and other available college funding. Zelda is an outsider.

Todd is a fourth-year student majoring in pharmacy and is 27 years old. The service-learning course he enrolled in was required for pharmacy students. Todd taught middle school students in a public school about health and nutrition for his required service. Todd is an insider.

Melissa is a 21 year-old, fourth-year student majoring in pharmacy. Melissa completed the same service-learning course as Todd, the pharmacy course in which college students taught middle school students about health and nutrition. Melissa is an insider.

The following students attend Research University:

Kelly, a 23 year old junior majoring in English enrolled in an English/gender studies course, and her service included renovation of a porch of a single woman who lost her home as a result of Hurricane Katrina. Kelly is a rebel.

James is 22 years old and majored in psychology. The service-learning course James completed was a political science/economics course, and his service included being the service-learning facilitator for another course taught at the university. He provided support to the faculty member and the students in a course while they tutored middle school students in math and science. James is an insider.

Ellen is 20 years old, a senior, and majoring in math and economics. The service-learning course she enrolled in was an environmental sociology class, and her service for the course included collecting data through interviews of area residents about their recycling knowledge and habits. The students in the course analyzed the data and presented it to a local, grass roots environmental organization. Ellen is an outsider.

Sarah majors in history and international development and is a 20 year old junior. Sarah was enrolled in the same English/gender studies course as Katherine. She also helped renovate a porch of a single woman who lost her home as a result of Hurricane Katrina. Sarah is an outsider.

Robert, a 20 year old junior majoring in architecture, completed a historical architecture service-learning course. As part of his service, Robert was required to complete a historical preservation survey of houses through photographs. Robert is an insider.

Corinne is a senior, 22 years old, and is majoring in political science and sociology. The service-learning course she completed was a Latin American studies/international development course, and her service included volunteering at a local law clinic which provided support to legal and illegal immigrants. Corinne is a rebel.

#### Determination of Participants Using Horowitz's Model

In addition to knowing the students' majors, ages, and service experience, it is also necessary to describe the way in which the participants are characterized when using Horowitz's model. The three groups of college students, as defined by Horowitz (1987)—insiders, outsiders, and rebels—were almost evenly represented among the college students interviewed for this study. Their classifications, mentioned in the previous sections and in more detail in the following section, emerged based on the information students provided in their interviews. They discussed their priorities and values as college students, as well as their interests and involvements on campus, in the classroom, or in the community. Through the students' interviews, their descriptions of themselves and their experiences provided strong evidence for their classification of each of the groups of college students. Based on these interviews and the multiple but interrelated matrices developed during data analysis, I determined which students emphasized the characteristics of insiders, outsiders, and rebels. By taking the information they

provided about their service-learning experience and their college experience in relation to the groups of college students illustrated by Horowitz (1987), I was able to effectively determine the group in which each of the students paralleled.

Of the 12 students interviewed, four were classified as insiders, five as outsiders, and three as rebels. Each student spoke in depth about his or her service-learning experience, yet each group emphasized different aspects of the experience or form of development. Examining service-learning through the lenses of these groups allows for a new understanding of the way in which college students are transformed by the experience. Horowitz's (1987) research on this area of college students and college culture concluded in the late 1980s, and there has not been any additional examination of these groups since then. In addition, there has been no study of these groups of college students in relation to their service-learning experience and intellectual development. Furthermore, intellectual development is interpreted in a different way when one considers the service-learning experiences through the lenses of these groups of college students. The following section will explore the characteristics of these groups in relation to the students interviewed in the context of selected general themes. It will then establish a foundation for the analysis of their intellectual development in the conclusion of this chapter.

### *Insiders*

The insiders, as described by Horowitz (1987), prioritize interaction among peers and social events through traditional campus life over academic learning and engagement; they identify strongly with peers and look to them for knowledge, insight, guidance, and support, as opposed to their professors. Through service-learning, insiders value the coursework and service carried out among their peers and prioritize the camaraderie gained from the experience. The academic benefits are important but often secondary for these students. The insiders in this study



include James, Robert, Todd, and Margaret. These students demonstrated characteristics that fit with this group.

All four of these students could be described as “student leaders” and took on leadership roles, either through actual leadership positions on campus or in group projects. According to Horowitz (1987) in her analysis of insiders, or as she refers to them, “college men,” “In the early twentieth century, as presidents and deans empowered college men as the official students leaders, the canons of college life shifted from antagonism to support of the administration” (p. 13). Many of today’s campus leaders could be described as insiders, and while the antagonism towards the administration has evolved into a mutually beneficial relationship, they continue to identify and connect with other students rather than faculty. The four students in this study exemplify those characteristics. James spoke about his general experience with service-learning in the beginning of the interview:

I think it may have indirectly empowered all of us . . . by creating, us as leaders because we were all identified for doing our service-learning, so it really facilitated, it really, it’s just creating a network of people who are aware of the social issues and why we need service-learning and why we need community action.

James and the other students were enrolled in this class to be service-learning facilitators for the professors because they were identified as leaders, which is characteristic of insiders. Robert could also be described as a leader because of the experience he obtained in high school, which included working for an architect one summer. He was also aware of service and service-learning through his high school’s religious mission and the incorporation of social justice initiatives in the curriculum. He compared his college service-learning perspective to that of his classmates, stating,

...so I had some of that experience before and it was something I really thought was interesting and really enjoyed. And, so but again for a lot of students, I don't think they had, I mean at least for me before I did that high school work. I kind of had this romantic vision of an architect and it broke that vision but it wasn't in a bad way at all. It also was for the students to kind of see that there's other things that architects can do as well. So I think it had that, served that purpose as well.

Robert and James brought service and discipline-based experience, respectively, to the service-learning classes in which they were enrolled, and this expertise contributed to the development of their leadership characteristics.

Melissa and Todd assumed symbolic leadership positions in their classes and through their service-learning experience. The interviews showed that they were leaders in the student groups that went to the middle school, organizing and representing the groups and providing support and information to their group members. Beyond their roles as leaders, their focus on and relationship with their peers was significant. When speaking about her service-learning class, Melissa said, "My service-learning experience was one that was very interesting. It gave myself and my classmates the opportunity to exercise our public speaking abilities, whether we had them or didn't have them." Todd also emphasized his experience in relation to other students. When speaking about the different schools, some of the pharmacy students were familiar with their reputation and shared it with other students. Todd was pleased, but also concerned about that information:

I'd say it's good that they gave us the heads up, but I didn't want other people in our group that already had a preconceived idea of the situation to simply get scared or already form their own ideas, misconceptions or what not. But it pretty much gave me the heads

up or the opportunity to think ok, well I need to be on my p's and q's just in case because I happen to be in a group with a few people who I already knew had the tendency to be shy...

Here, Todd demonstrated his role as leader by taking responsibility for guiding members of his group through the experience. Both he and Melissa possessed qualities of an insider because of their interest in the peer relationship as well as their leadership roles.

### *Outsiders*

Outsiders, as defined by Horowitz (1987) include those college students who prioritize feedback from and attention to faculty as well as their academic experience. Focusing more on their learning and the value that a college education has for their future over their leadership positions on campus, outsiders generally seek service-learning opportunities through the classroom setting. They value the balance between the classroom experience and the service component highly and benefit from this structure. In this study, the outsiders include Ellen, Sarah, Rachelle, Beth, and Zelda.

All of the students spoke about their professors in a way that was consistent with outsiders; they possessed a great deal of respect for their professors, were interested in their discipline, and looked to them for knowledge, guidance, and support. They all strongly identified with faculty. The faculty-student relationship for these students is the connection they prioritize during their college experience. Rachelle strongly depended on the feedback from her professor. As part of the course requirements, she had to present her service experiences and how she responded to them. During the semester, Rachelle improved in her analysis and presentation techniques and her professor told her so. Rachelle said,

Even the instructor told me like you know, you really have improved from when you first started. So I was, like, to get a compliment from [name of professor], that was kind of big. You know she always tells everybody good job, but when she was like you improved, that was a big one.

As an outsider, Rachelle valued the support from the faculty member over peers. Because of this priority, her appreciation for her professor's feedback was truly significant for her and her development. In addition, Ellen valued the way in which her professor structured the class as a student-driven class, stating, "...our professor was very into letting us mold the curriculum...it was definitely an interesting way to structure the class. I liked it a lot." Although Ellen described somewhat of a "disconnect" between the course material and service, she appreciated the professor's attempts to integrate the two components of the course.

Both Sarah and Zelda gained new perspectives because of their professors' influence on their service-learning experience. Sarah spoke about the connections between the service and the course material towards the end of the semester, and the way in which she came to understand the material differently. She described her professor's views on the class and how it influenced students when she said,

...she's [name of professor] like you're not even going to realize how important this class is going to be until the end, and she was definitely right. But I kind of like to know what I'm getting myself into, so that may have helped, but it was an experience the way that class was set up. And looking back on it, it was pretty cool.

Zelda had a similar experience with her professor, who also emphasized the changes students would undergo through the course, how the experience would change their perspective, and how they would incorporate the material in other ways. She explained,

When [name of professor] told us like you are going to, you may not want to learn this but when you do learn it, it's going to come back to you. And when you go to your other courses, you're going to be like, oh this is what she was talking about. And when I was doing it, that's what I thought about. I was like, she is right!

Zelda was excited about seeing the connections between the material in the service-learning course and other academic courses. She valued the insights of her professor because of her priorities as an outsider in terms of her academic experience. Historically, outsiders were the minorities on college campuses and were not included in the insiders' social circles; instead, they sought confirmation from faculty. Today, these students are not all minorities, but still seek approval and mentorship primarily from their professors until service-learning became a part of the curriculum.

Another characteristic of outsiders includes their prioritization of education and learning; they are practical students, and they appreciate the knowledge that they obtain from their professors. According to Horowitz (1987), in the early 1900s, the campus body began to change to include students from middle class families and the curriculum evolved to focus on data collection, data analysis, and discovery of new knowledge. Horowitz explained,

The student as well as the professor engaged in the examination of data and the building of conclusions. The goal of education became the teaching of methods: the asking of questions, accurate gathering and testing of data, logical reasoning, clear presentation. (p. 73)

This focus on knowledge is demonstrated in a number of the outsiders' interviews. For instance, Sarah described with excitement what was important about her college experience:

I wish I could stay in school my entire life. I guess the most important thing to me right now is just being able to take what I've learned and what I hope to learn and do something productive with it... I want to learn. I just really like all the classes and everything else... the professors, just learning from them.

Sarah's emphasis on the academic experience is evident here, as is the practical bent of outsiders' perspectives.

Another student who examined her service-learning experience in relation to her academic experience was Beth. Through the public speaking course, Beth was learning how to be a qualitative researcher. She interviewed residents in a nursing home about their Hurricane Katrina experience, transcribed the tapes, and developed themes. She also took into consideration her "subjective I," without knowing that term. She described this self-awareness in relation to the course and her experience with the interviews in the following way:

[I] think about my story and where did I get those stories from, you know, what happened in my life to cause me to have those stories or what memories and things like that... how did I get to that point that I got that opinion or felt that way.

This observation of her own experiences and their effects on her perspective is not only characteristic of an outsider, it is also an advanced way of understanding coursework, her perceptions in comparison to other students, research, and the process of analyzing data.

### *Rebels*

Rebels, as defined by Horowitz (1987), are students who challenge insiders, the traditional college setting and structure, and the university administration; they strive to seek the truth and knowledge, but the journey is for the sake of knowing, and the college degree is a secondary benefit. Rebels are rarely satisfied with the current status of their curricula and oppose

the insiders' traditional leadership and academic initiatives. Independently-thinking rebels perceive insiders as mini-administrators, making and following the rules and policies established for the student body. Rebels, on the other hand, strive to challenge those rules and policies or simply circumvent them and take action outside the traditional academic and co-curricular structure. Service-learning provides an interesting outlet for rebels. Although service-learning has been carried out mainly through courses and the curriculum, the rebels pursue this area with interest because it piques an area of their identities that supports their activist perspective. While service-learning is a significant part of many curricula, it still provides an opportunity for rebels to take part in an area of the academy that historically was carried out by activist-minded faculty and unrecognized by the academic administration or community. In this study, the rebels are Kelly, Corinne, and Kristen. The following section will describe their characteristics and how service-learning affected them and their intellectual development.

Rebels generally seek truth or knowledge individually and independently of other students and faculty. They circumvent the system for themselves or with others like them. From Kelly's perspective, the focus is on herself, not in a selfish way, but as a form of introspection as well as action. When describing the structure of the English/gender studies service-learning course, she said,

I think I appreciate things that are more loosely structured, you know, just because I feel like I can explore more and focus more on what I'm interested in, like what is more meaningful to me. But I think it's more difficult as well.

Despite the challenges Kelly would face in a loosely structured course, she values it more because it allows her to focus on areas of her interest, and it challenges her. Kelly also spoke about her journal for the class and the open-ended questions to which she had to respond. While

unsure of the expectations, she decided to respond in a way that made sense to her. Kelly explained, "...I'd rather just do what I want and what feels good rather than doing what I think is right, you know, or what's expected..." Kelly's attention to her own way of writing about or analyzing a situation and her way of challenging what is expected demonstrates her identity as a rebel, a modern version of rebels who had historically confronted or influenced the college curriculum (Horowitz, 1987). For Kelly to learn and to develop intellectually, she needs to explore the opportunities she has and examine them in her own way, not from the perspective of her professor or of her peers.

Corinne's service-learning experience also displayed an independence of thought and action; she was connected to her professor because she valued his rebel characteristics, and yet, she distinguished herself through the process. She explained her changing perspective on service-learning:

...all of all of the service-learning experiences, I've done them on my own, like I've never worked in a group with anybody...I could tell you the first semester that I was forced to do service-learning (slight laughter), I didn't want to do it. I definitely didn't want to do it and then by the time I got to [name of professor] class, I was like, yeah, I want to. It did change my personal attitude towards it.

Working independently was the structure to which Corinne became accustomed. She became more engaged with the experience and with the professor's class, a fact alluded to in the quotation above; however, Corinne's service work continued to be independent of any significant university relationship. Horowitz (1987) wrote about rebels and their focus outside the academy: "...the rebels perceived that the campus was not all. Outside its gates stood a vital world of economics, politics, and the arts, more real than the fun and games of football" (p. 86).



Corinne focuses significantly on the external community, which is evident in her identification as a member of that community. She said about service-learning, "...I think it's personally rewarding and it makes you want to keep getting involved, especially in [name of city] where *we* could use as much help as we can get" (emphasis added). Corinne moved to the city to attend Research University and has lived there for the past three years, and yet her strong identification with the city is reflected in the comment, "we could use as much help as we can get." Corinne's work was outside the gates. Her work was with immigrant detainees and an attorney who represented them, and so her attention was outside the walls of academia even though the service was included in an academic course.

This type of independence of thought and action of Kelly and Corinne can lead to initiatives or projects outside the university, as in the case of Kristen, who interviewed residents in a nursing home for her service-learning class. Kristen was a student who appeared at ease with herself and spoke freely about her concerns, her expectations, and her successes. She, like Kelly and Corinne valued the independent-thinking experience and explained that "meeting others, taking courses, and going to college helped me grow as an individual". Yet Kristen took the experience of her individual growth and continued that development by starting her own media entertainment group. This group included Kristen and other students at Teaching University, all of whom created it in response to a "mini-riot that was shut down." Kristen leads this anti-group, and explained,

The group is not an officially recognized student organization because it was too much work to go through the process. We partner with other student organizations [recognized by the university] when we want to do an event...some of those events are for charitable organizations to help others...

By choosing to start a student organization, but avoiding or ignoring the traditional process whereby college student groups are officially recognized, Kristen epitomizes the characteristics of a rebel. According to Horowitz's (1987) description of rebels, "Where existing organizations barred them, they created new ones" (p. 96). While Kristen was not excluded and participated in some of the traditional campus organizations, such as a sorority, she demonstrated a different kind of intention and purpose during her college years, thus her creation of her own non-registered student organization, which contradicts the traditional campus structure and expectations.

Because of the interview questions posed to the students and the detailed information they provided about their service-learning experience, their college experience, as well as their values and priorities, it was fairly clear how they represented one of the three groups of college students. Based on the data they provided and the historical framework developed by Horowitz (1987), the participants were identified with one of the groups of college students. This identification allows for a more nuanced analysis of their service-learning experience and perceptions of their intellectual development. Moreover, these groups—insiders, outsiders, and rebels—are transformed in new ways, both intellectually and individually, through the service-learning experience.

#### Eyler and Giles' Study Reexamined

Eyler and Giles' (1999) study is instrumental in understanding the impact of service-learning on college students' learning and intellectual development, yet there are unexamined areas that would enhance the understanding of intellectual development and service-learning, namely the individual characteristics of students. Some of the students in this study provided examples of the way in which they developed intellectually based on Eyler and Giles definition;

however, others did not demonstrate their intellectual development when taking Eyler and Giles' definition into consideration. This section will illustrate aspects of the relationship between intellectual development and service-learning and also demonstrate the importance and value of individual characteristics, as defined by Horowitz (1987) when considering college students' intellectual development.

In their book *Where's the Learning in Service-Learning?*, Eyler and Giles accomplished the monumental task of exploring the question of what students are learning through service-learning. Through both qualitative and quantitative methods, these researchers examined the various facets of college student development and student learning in a thorough and cohesive manner, providing valuable insight to the research and practice of service-learning. Their research is also significant because it was the first large-scale study done of its kind related to service-learning and student learning. Their findings on students' intellectual and cognitive development were discussed in Chapter Two of this dissertation and questions arose related mainly to their lack of consideration of the individual characteristics of students who participate in service-learning. The following section will illustrate the ways in which the college students interviewed support Eyler and Giles' research; yet at the same time, these interviews bring new insight to researchers studying college students' perceptions of their intellectual development through service-learning, adding to an understanding of college students not addressed by Eyler and Giles.

Eyler and Giles (1999) discussed college students' intellectual development in relation to the quality of the service-learning program, asserting that the more integrated the service is with the course, the more students demonstrate learning. They wrote,

the studies reported in this book support the view that many of the intellectual goals of higher education, including *learning and application of material*, *critical thinking and problem solving*, and *perspective transformation*, depend not on the service experience alone but on how well integrated theory and practice are through application and reflection. (emphasis added, p. 166)

These categories, which they organized under the rubric of the intellectual goals of higher education, are the areas this study included to examine the information provided by the college students interviewed at “Teaching University” and “Research University.” Each category will be discussed in relation to the interviews conducted in order to explore the ways in which students’ experiences support Eyler and Giles’ categories and areas that require further or different analysis.

Learning and Application of Material The first category, *learning and application of material*, includes broadening the definition of academic learning beyond the traditional classroom setting, according to Eyler and Giles (1999). They explained that students in a well-integrated service-learning program “are more likely to demonstrate greater issue knowledge, have more realistic and detailed personal political strategy, and give a more complex analysis of causes and solutions to the problem at the conclusion of their experience” (p. 81). In the interviews conducted for this study, learning and application of material were discussed to some extent by virtually all of the students. Many of the students demonstrated an understanding, not only of the material they were learning, but also of the way in which the experience applied to the material. For instance, Kelly, Sarah, Corinne, Kristen, Rachelle, Beth, Zelda, and Todd all explained ways in which their service experience related to their classroom experience, and subsequently, to their learning. More specifically, in their public speaking course, both Kristen and Beth understood

the connection between the interviews they conducted and using those skills to give speeches.

Beth explained,

...doing those type of projects...allow students just to take real life things and connect them to what you're reading in the textbook cause most students read the textbook and you know, they kind of have a hard time applying it, but doing service-learning projects like that, it's one way for you to apply what you're learning to what's going on outside of the classroom.

Corinne spoke about the relationship between her service experience with the law clinic and helping immigrants; she spoke about service in connection with the current class in which she was enrolled with the same professor, as opposed to the course during the previous semester affiliated with the service. Because of the service-learning experience, she first explained that she "had to learn all the immigration laws," so as to be informed when she spoke with the detainees. Corinne also described the link between her current social movements class and her service with the law clinic from the previous semester. She described the current class:

I think the material is much more applicable to be honest because I mean the class is basically the people's struggle of Latin America and like you're seeing the consequences of these social movements that we're studying about. And how you know, that's the consequences today. People are leaving.

When asked if she thought that she had more perspective on the service experience, which might enable her to make more connections to the course with which it was linked, Corinne said no and that the material of the social movements course was more applicable to the service with the law clinic. The example of Corinne's experience illustrates two points: 1) although she did not

demonstrate significant connections between the service and the course with which it was affiliated, she did relate it strongly to the current course taught by the same professor, and 2) learning immigration laws and understanding the impact of those laws on immigrant detainees, and the consequences of the economic struggles in Latin America on some of its residents illustrated her understanding and application of material.

Unlike the well-integrated courses, the service experience, which was not strongly connected to some of the courses, did not facilitate students' understanding and application of material. The experiences of Robert in the historical architecture course support Eyler and Giles' (1999) assertions, in that he explained that his service experience did not strongly correlate with the classroom experience; therefore, he experienced challenges when explaining learning and application of material. Robert said that despite the professor's strongly valuing service-learning, there was very little relationship between the service and the course material. While he understood the challenges associated with doing service with a survey course, he saw the value obtained by other students in the class who were "identifying different types of buildings, different styles...a lot of people haven't had any kind of practical experience doing anything." It is here that one begins to see a way in which the themes of learning and application of material may remain incomplete. By contrast, Ross and other students, described as insiders, placed more emphasis and focus on the development and growth of their peers rather than themselves.

Exceptions to this category include James, Ellen, and Melissa, who said that there were fairly strong correlations between the service and the course material, but they did not articulate a clear understanding of learning through the application of material. These students do not demonstrate learning and application of material, described by Eyler and Giles (1999), but do

exemplify other aspects of intellectual development as defined in the general themes in the next section of this chapter.

Critical Thinking and Problem Solving The interviews of students for this study also provides some evidence also exists to support Eyler and Giles' (1999) second category, *critical thinking and problem solving*. In their discussion of critical thinking and problem solving, Eyler and Giles stated that "critical thinking, which allows students to identify, frame, resolve, and readdress social issues, is dependent upon both knowledge and the students' level of cognitive development" (p. 101). They argued that there is a relationship between students' cognitive development and their ability to use critical thinking, and that service-learning can play a role in students' critical thinking and problem-solving skills.

In the interviews conducted for this study, a number of the students showed that their critical thinking and problem solving skills changed through the service-learning experience. From an in-depth analysis and evaluation of course material to an understanding of various problem-solving techniques, some students articulated their critical thinking skills in relation to their service-learning experience. Nonetheless, as the expectations of some of the courses increase and the categories become more challenging, there are fewer students who exemplify these characteristics because of the lack of correlation between the service and coursework, on the one hand, and the students' developmental position, on the other.

The students who demonstrated development of critical thinking and problem-solving skills in relation to their service-learning experience include Kelly, James, Sarah, Corinne, Kristen, and Melissa. For instance, in her English/gender studies course, Kelly spoke about the class discussion, the way in which she was challenged, and how that affected her thinking:

Just being with people who were, you know, thinking through the same questions and being forced to talk about it and to do something and actually go out and see the work that's being done and being asked, you know, what are you going to do as well?... That sort of made me think, what should I be doing? What else can I do?

In this class, where she and her classmates built a new porch for a single woman who had lost her home, Kelly wrestled with questions about New Orleans, where the responsibility for rebuilding should be placed, and her sense of personal responsibility. Kelly was challenged by the social issue of rebuilding a city after a major natural disaster and formulated in her mind the issues and the assignment of responsibility. Yet, this theme does not tell the whole story of students like Kelly. Kelly, because of her rebel characteristics, takes this theme in another direction. Because Kelly, and other students like her, was not satisfied with only examining questions and grappling with the issues, she explored ways in which she could take action and take what she had learned outside the walls of the Ivory Tower to effect changes in the community.

Melissa also exhibited characteristics of a student who is developing critical thinking skills through her pharmacy course, where she and her classmates taught middle school students about health and nutrition. The area in which Melissa recognized her development involved work with her group members to plan and carry out the instruction in the school:

...if you are the group leader, you have to set up situations that will bring out this person's complement to the group in the best manner that you can. And that's what I learned. I'd come in, I assessed, I looked, I talked, I asked questions and if I am chosen to be the group leader, I already have a good idea of what everybody's strengths and weaknesses are and that's what we're going to work on.



Melissa illustrated her ability to assess and evaluate situations and individuals and, while not exactly a “social issue” as described by Eyler and Giles (1999) in their definition of critical thinking, the group environment to which Melissa refers is her focus. This environment for Melissa is an opportunity for her to exercise and test her critical thinking skills, and, based on this example, it would seem that not all issues need to be socially based for a student to illustrate the development of her critical thinking skills. Moreover, this setting of the classroom environment also reflects Melissa’s priorities as an insider, one who looks to and expects to learn from her peers. Service may or may not have been well integrated in the course material of students who did not discuss their critical thinking and problem-solving skills sufficiently. Yet because Eyler and Giles (1999) also asserted that students’ cognitive development plays a role in their critical thinking skills, which may be a reason for some students’ failure to articulate this form of intellectual development.

Perspective Transformation The third theme described by Eyler and Giles (1999) is the notion of *perspective transformation*, which they described as “not about accumulating more knowledge but about seeing the world in a profoundly different way” (p. 129). They also explained that it “involves changing fundamental assumptions...” (p. 134). Because, according to Eyler and Giles, perspective transformation is a rare occurrence, it is unsurprising that few students in this study truly provide examples of this form of intellectual development. Some students come close to this category, such as Beth when she spoke about learning from others as a way to understand herself. Through the interview process, she explained herself by referring to the way that she engaged others:

You know I learned all that from interviewing and I just kind of used it along the years in each of my classes and that’s kind of made me a better student to be able to talk in class,

discuss different points in class. And you kind of learn about yourself too, what your views on life are. You know, just talking to other people, you learn about what you think about a certain event or situation just by learning about what that person's perspective is; you get a better understanding of what your perspective is.

Beth's discussion of learning from others and the impact of doing so on her own viewpoint shows the potential for a form of perspective transformation. Later in the interview, Beth talked about the importance of understanding the development of her own story:

It's good to do, like that's what I learned. It's good to do that because if I feel a certain way about something or someone or a situation or event, you know how was I, you know what happened, how did I get to that point that I got that opinion or felt that way. And it's good to know because you're not, not just if someone asks you but just for clarity for yourself, hey, this is what happened in my life that this is why I feel about this event. So it's just good to know for yourself and you know, from taking those courses, I learned how to, just how to do that and just perfect it maybe. I'm still learning of course.

By looking back and analyzing the way in which she developed and formed her opinions and ideas, Beth began to make connections to her present-day thinking. Typical for an outsider to examine herself closely and in the context of their academic experience, Beth initiated the exploration of this form of intellectual development. From this point, one can explore the possibility of her continuing awareness of her thinking, but it is debatable if it is because of the service-learning experience.

James was an interesting student to interview because of his experience with service-learning. His role as the liaison between the faculty member and the college students in the service-learning course gave him a multifaceted perspective on his own development and the

growth of other students in the service-learning course in which he had been a student. Like Beth, he demonstrated evidence of experiencing aspects of perspective transformation, especially when he spoke about ways in which he resolved what he was learning in the service-learning class and the views that he had brought with him to college. James spoke slowly and was selective about his choice of words:

...but really the thinking process really helped me break down a lot more of those moralistic values and see them for a value I can live with and you know, I can look at issues that are controversial and not be afraid of tackling them regardless of differing opinions,...I think it was really a defining moment in really piecing together my thinking of breaking down those walls... and having the power to use those tools that I've been given and worked with and really put them to use to work on huge tasks and it kind of puts everything in relative light.

James referred to "breaking down walls" a number of times in the interview and, for him, those walls represented preconceived ideas of individuals, stereotypes, or judgments. It also characterized individuals' unwillingness to recognize and discuss issues that create discomfort or controversy. James wanted to convey the significance of his experience and the way in which it changed his thinking and perspective. Realizing that he had to make changes to see, not only a more global perspective, but one that transforms his viewpoints, James was receptive during the service-learning experience to the fact that his own moralistic values had kept him bound to certain ideas. In addition, James began to recognize that some of his classmates were confined by certain values and judgments, thereby impeding their development. James most closely resembles a college student whose perspective is transformed through his service-learning experience.

Furthermore, James' individual characteristics define him as an insider, the student leader who identifies strongly with peers over faculty. The notion of perspective transformation, as defined by Eyler and Giles (1999), is important and effects significant changes in a college student's life. Yet, James did not undertake his development towards perspective transformation alone; he also did so through his reflection on his peers and his recognition of their lack of transformation, which allowed him to recognize this important change in himself.

The three intellectual goals of higher education, as defined by Eyler and Giles (1999), which include learning and application of material, critical thinking and problem solving, and perspective transformation, provide service-learning researchers and practitioners with an understanding of college students' intellectual development through their service-learning experience. Their work is significant, not only to the research on service-learning, but also to the field of higher education, because it is the first of its kind in terms of depth and breadth. Nonetheless, there are areas of the work which could be enhanced or explored in new ways. The following section examines themes which emerged from the interviews; these themes demonstrate that, while Eyler and Giles provided an important perspective on service-learning and intellectual development, additional analysis is needed to understand college students' *perceptions* of their intellectual development. Moreover, by including Horowitz's (1987) groups of college students in the analysis of intellectual development, the study becomes significantly richer.

### General Themes

The students interviewed had varying experiences with their service-learning courses. Some of the service experiences were strongly integrated with the course material and topics, some experiences were moderately integrated, and some service activities were not connected at

all, but were instead “add-on” components of the course. Students also ranged with the way in which they described their service-learning experience in relation to their intellectual development, from lengthy and specific descriptions to minimal discussions of how they perceived their intellectual growth. In addition, some students explained that while they did not see the development in themselves, they recognized characteristics of intellectual development in other students in their service-learning classes. The next section includes the themes which emerged from the interviews and will begin to explain the connections (or their absence) between students’ service-learning experience and their perceptions of their intellectual development.

Five major themes related to college students’ perceptions of their intellectual development emerged from the interviews. They were:

- 1) The questioning of authority and experts
- 2) Communication skills and audience
- 3) Knowledge of perspectives and contexts
- 4) The unstructured nature and complexity of problems
- 5) Global interpretations of service-learning

Multiple students interviewed discussed each of these themes to varying degrees, illustrating the common perceptions of service-learning and intellectual development that students had through their experiences.

#### The Questioning of Authority or Experts

The first theme, the questioning of authority or experts, often emerged when students were truly thoughtful about the changes that occurred through their service-learning experiences. The authority or experts that students’ questioned included media sources, society, researchers in

their fields and the statistics that they used, and family members. Some students' mannerisms and tone of voice often changed when they addressed this concept. They spoke quietly, as though they were still unsure or hesitant to challenge those ideas, and other students exhibited frustration, as though they had been fooled until now. This shift in tone or mannerisms reflected the seriousness with which they thought about their perceptions and experiences.

Two students described ways in which they began to question types of data collection and statistics after they took service-learning courses. Ellen, the junior majoring in math and economics, enrolled in an environmental sociology class, in which students collected data from area residents about their knowledge and practice of recycling. These data were analyzed by the students, and a report was presented and submitted to a grassroots environmental organization. Ellen worked with two other students going door to door asking questions of residents, took responsibility for the "recommendations" portion of the report, and was one of three student presenters of the information to the board of a local environmental organization. When asked about the survey Ellen had conducted and the way in which that experience changed or affected her thought processes, she responded:

They [thought processes] probably have. I don't think I realized it at the time. Definitely not at the time no, um because I guess when you're learning about the theoretical part, you're learning about surveying and how people come up with this data. And then you actually go out and do it and you're, like, ok, I guess it does make you realize more of how data's acquired. You know it's kind of like this mysterious, anonymous thing of "oh you have statistics of this and that." But it gives a more hands on, real approach... You know, it's also interesting you're able to see the faults in data collecting because you realize when you're taking a survey that sometimes it's a rough estimate or it's a...with

the 1 to 5 scale people are not really giving you correct information. It's a lot of how to present their information and how the person is collecting the data is interpreting it. So there's a lot of intermediate steps between what actually happened and what is actually reported.

Ellen began to recognize the flaws in data collection and data reporting based on the questions she posed and the responses she received from the survey participants. She also was astute in her observation of the discrepancy between the data that are collected and the data that are reported. Ellen also talked about questioning statistics specifically referring to her service-learning experience:

...you're able to see that not everything is an exact science. That (laughter) you maybe think it would be. Um, so you come to appreciate the difficulty in collecting this information. I think I kind of just accepted statistics before and now you learn to take it with a grain of salt and to maybe examine it further and see where there might be...I think that's also a tribute to taking math classes, but also to this [service-learning] class.

You're looking at information given. You're not just taking it in as, ok this is what it is... This questioning of the "experts" in the field strongly shifts the way in which some students originally perceived information that they believed to be valid and true. Ellen's questioning clearly demonstrates changes in her thought processes and growth in her intellectual development through the service-learning experience.

Sarah, the senior who was majoring in the English/gender studies class at Research University and helped rebuild a porch of a single woman's home destroyed by Hurricane Katrina, also invoked the questioning of authorities or experts as an important theme. The course that Sarah took taught the students basic construction, examined the history and sociology

of women in construction, and studied individual stories of women who were affected by Hurricane Katrina. When explaining the impact of the service-learning course, she stated,

It's [service-learning class] affected me in other ways too, just reading a newspaper, you just kind of have to take everything with a grain of salt...Even statistics or something like that. An article may state something but I mean there are so many things that go into it.

Where did he get his [author of article] information from?

Sarah, like Ellen, questioned ostensibly reliable sources and experts because of her experience in a course that raised issues about equity in relation to a national disaster. Sarah spoke further about human nature and how previously held ideas changed. She explained, "...you can't really trust. I mean, not saying things are conspiracies and things like that. You just kind of have to realize that sometimes the people in charge are human..." Accepting the reality that experts and authorities are human beings subject to errors shows that the students in these service-learning courses were significantly engaged in and affected by the service experience and the way in which it was incorporated with the course material. This process also shows that the students underwent a transformation in their thinking, added new, and, at times, contradictory information to previously held ideas.

Other students interviewed discussed the questioning of broader social issues and certain areas of society. One student who discussed challenging social norms was Zelda, the senior at Teaching University whose service including teaching high school students about gender, college, and sources of college funding. When she went with her classmates to the high school, she explained that one of the objectives was to observe the way in which males and females interacted when they posed questions about toys and colors and expectations of each sex. The



college students brought their observations back to the English class and incorporated them in discussion and papers. She said,

When we asked them, as far as like toys go, who plays with this toy? Why does society think like this?....everybody thinks it's the norm for girls to play with Barbie...Society thinks this is the norm for boys to play with trucks and being dirty and girls to be vulnerable and precise and pretty. But that's not the case for most students.

As the semester went on, Zelda and her classmates brought up additional social norms for the high school students to think about, including clothing, sex, marriage, and homosexuality. For example, Zelda asked the students about same-sex marriage, the students did not support it.

When hearing their response, she realized, "It's not 'normal'. There we go again. Back to society thinking everything has to be, I guess, traditional." Zelda's experience in this high school classroom, along with the readings from the English course, enabled her to recognize and question traditional social norms, making her skeptical about what is being taught to her and these high school students.

In addition to questioning social norms in general, some students questioned specific areas, such as media sources. They began to consider, through the service-learning experience, that what they were seeing on the news did not always reflect or accurately portray what they were seeing in the community. Kristen, a senior who enrolled in the public speaking course at Teaching University, was expected to interview residents in a nursing home about their experiences with Hurricane Katrina. The students interviewed the residents in groups and individually; they transcribed the interviews and learned how to organize the interviews and develop themes. The purpose of the interviews was for students to develop communication skills

and understand their audience to improve their public speaking skills. After Kristen interviewed a couple of the nursing home residents, she said,

I am more likely to critique various sources of media – both television and newspapers.

Through the interviews, I learned from individuals that information presented on the news was incorrect, and they told me what really happened. Because of this, I am more aware, and, therefore, more critical.

Her critiques of media sources demonstrated her increased willingness to question traditional sources of information. Here, Kristen begins to recognize the importance of not only viewing and reading news with “a critical eye and ear,” as she explained, but also taking into consideration the individual perspective and story.

Besides questioning the media, Corinne, the student who worked in the law clinic and provided information to and translated for illegal immigrants, focused on the immigration system in general. After working closely with immigrants, their attorneys, the court system, and various consulates’ offices, she began to question the structures that are meant to provide information and dispense justice. When asked about her perspective changing after the service-learning class, she responded,

I’ve always had like a respect for the judicial system and what’s the law and obviously not all laws are fair but um, I guess it just made me more aware of just how broken down the system is in general, and if it’s this way with immigration, I just wonder how it must be with other kinds of things, other kinds of law application, so yeah, it definitely got me thinking about that.

Corinne’s questions and critiques of the immigration system affected her perceptions of the legal system in general and changed her views on the judicial system significantly. When asked about

her thoughts on the judicial system, Corinne stated, "...it just made me more aware of the laws that aren't fair and things that aren't right and just aren't working the way they are...I've started to question more." Corinne's questioning is linked with the "system in general" to which she refers, shaping her thoughts and perceptions in new ways and facilitating intellectual growth.

The final example of the questioning of authority or experts is described by Beth, a senior at Teaching University who enrolled in the public speaking course in which students interviewed nursing home residents about their experiences with Hurricane Katrina. Like Kristen, who was also in the course, after listening to the individual stories of the nursing home residents, Beth was affected by the stories that she heard and her encountering new perspectives. Partially influenced by these new ideas and experiences, Beth also began questioning broader issues related to lessons and values of her family:

...it probably made me question my personal view on politics and how associate it with the whole, um, the whole scene and things like that... it kind of just made me wonder whether or not what I had learned for so many years was true or not and how much truth, whether it was something just told to me just to get me to stop thinking about it or something like that.

Beth's realization that what she was taught as a child may not be completely true is an important example of intellectual development of college students. After Hurricane Katrina, she described changes in her thinking about her value system in comparison to her family's values. While she did not say that the service-learning course strongly influenced this questioning, the course and Beth's questioning of perceived authority, her parents, occurred at around the same time. Eyler and Giles (1999) address a similar issue in their discussion of perspective transformation, specifically critical reflection. They wrote, "Without this struggle to explore the roots of the

disorientation they experience, students are unlikely to restructure the way they view the world...” (p. 145). Beth experienced a form of “disorientation,” meaning that when she began to question inherited assumptions at the time of the service-learning course, she started to rethink a number of issues she had taken for granted, including her value system and that of her family. This temporary confusion complements the questioning of authority or experts because although it can be an unsettling experience, it is one that brings an individual to an understanding for him or herself, not by or for another person.

### Communication Skills and Audience

Another theme that emerged strongly from the interviews included students’ communication skills, but more significantly, their ability to understand the audience to whom they were speaking better. While many students spoke about improvements in their communication skills, an area discussed in Eyler and Giles’ (1999) study, they also described their enhanced recognition and understanding of their audience, a new area that is not fully examined. Through the service-learning experience and working with various groups of people, a number of students learned to adapt their communication style to work effectively with the individuals that they strove to serve.

In the realm of teaching, both Rachelle and Melissa experienced greater awareness of their audience in their service or because of their service experiences. Rachelle, the senior majoring in elementary education, tutored middle school students in reading. Some students were designated by the classroom teacher as needing additional help in reading, but instead of focusing on those students, Rachelle took time to tutor all of them, because “we don’t want them to feel out of place,” referring to the students who were having trouble with reading. This was the first instance in which Rachelle understood the audience with which she was working and

adapted her approach to meet their needs. Second, Rachelle changed the way she spoke because she knew it would be better for the students she was tutoring. With certainty, she explained,

Well I changed my communication skills in the process while working with them because I have that extra [name of hometown] accent and so it was like, uh, don't do this and this, I was like, well, let me *rephrase* it, and then I would go back. You know, I communicate with them because I don't *want* the students to talk the way I'm talking. You know, you got to catch them while it's early.

Recognizing the audience Rachelle was teaching, she believed it would be best to adapt the way she spoke, so her way of speaking would serve as what she thought would be a more appropriate model for the students.

Melissa, the pharmacy student, also recognized the importance of communication skills, but mainly the “audience” she would soon work with in retail pharmacy. The pharmacy course Melissa was required to take included a service-learning component, for which the pharmacy students went to middle schools for a semester and taught students about health and nutrition. Melissa was instrumental in carrying out the organization of the service and putting students in groups because she volunteered in the office that oversaw this initiative. She thought that it was an effective teaching tool, and she strongly believed in this part of the curriculum. She also recognized the value of pharmacy students’ learning effective communication skills. She spoke about the different racial/ethnic and socioeconomic backgrounds of future pharmacy customers and the importance of understanding their perspectives to communicate the information better. Melissa emphasized,

It's information that they [pharmacy students] need to learn how to do it in a way they [customers] can understand, not in an abstract form to where they walk up to you, ask

you a question, and you've answered their question in your mind, but in their mind, it's like, I don't know what the heck you just said.

For Melissa, teaching middle school students about health and nutrition was an effective service project related to the pharmacy course because it provided experience for students to convey information and ideas to a different kind of audience. Nonetheless, while Melissa recognized the service's value, she had a slightly different perspective, involving ownership of the service-learning program; thus, she oftentimes saw the benefits in terms of other students, rather than herself.

Beth, on the other hand, saw significant changes in her own communication skills through the public speaking course she enrolled in at Teaching University. After conducting interviews with residents in the nursing home, Beth began to understand the relationship between interviewing and public speaking, and being aware of audience. When she described the public speaking course, she said early on in the interview, "I was already nervous about speaking period, but I think, I'm sure that's what the interview was, you know learning how to speak in different environments, you know versus learning how to speak in front of an audience." Beth learned that those "different environments" enabled her to adapt to new situations and respond to different interviewees in this service-learning course. Her ability to adapt and negotiate certain situations to gather the information had developed through the course, and she saw the value of knowing her audience to prepare for speeches more effectively.

Other students recognized the importance of audience in more of a public or societal area, from the civic to the judicial. Robert, the junior in architecture who completed a historical preservation survey through photographs of a neighborhood in New Orleans after Hurricane Katrina, was a keen observer of the neighborhood leaders and their positive and negative

responses to the Federal Emergency Management Agency (FEMA) representatives. Robert was a natural communicator and enjoyed watching the dynamics among various community and federal groups as they debated the history of the neighborhood and negotiated steps to assist the residents. As he took photographs of the different styles of houses and catalogued them, he observed:

I enjoy being able to be a little more creative than you know, just kind of sitting and plugging numbers into a computer. I think it was also kind of nice to give a personal experience of what the work is and making it a little more known to the public. I mean, kind of in New Orleans one of the things I feel is most important about recovery efforts is just the fact that it's staying in the news, it's staying in the public awareness, and any little thing I can do to help.

For Robert, ensuring that the information he gathered not only preserved the essence of this historic neighborhood, but also remained in the public eye, showed his understanding of conveying relevant information to individuals within and outside of the immediate community. He believed in taking responsibility for communicating to a broad audience. In addition, Robert described a situation where a FEMA architect did not understand the importance of audience. He explained,

I remember the first day when we had this FEMA architect come in lecturing us and they were showing slides of the houses in the neighborhood and saying this type is that, etc. He was saying something and then one of the community leaders said something and they kind of went back and forth [about the information on the houses]...The architect seemed very much like the FEMA that's portrayed in the media. He seemed much more talking down to the students and down to the neighborhood people...

While this is an interesting comment on the FEMA representative's lack of awareness on audience, Robert generally took on the role of observer as he described the service-learning experience. He often depicted examples of ways in which other students were affected rather than his own experience or development. Like Melissa, another insider, Robert commonly spoke of others and the impact of service-learning on them instead of him.

The other student who understood the importance of audience in communication skills in a societal setting was Corinne, who worked in a law clinic as a translator for immigrants. She had direct experience in learning how to shift her communication style based on certain audiences. From interviewing illegal immigrants about their criminal charges to providing them with advice to contacting various consulates' offices to give and obtain information, Corinne adapted quickly to accomplish her goals. When contacting the Latin American Consulate's Office, she said,

...the only difficulty I had was getting in touch with consulates, getting them to talk to me. But I changed the way I approached it. Like first I would call them in English, and be oh I'm a [name of university] student, blah, blah, blah. Then I tried talking to them in Spanish and they were a lot more open to talking to me when they heard me. That was the most difficult part...

Through the service-learning experience, Corinne learned the importance of adapting to different environments and communicating in certain ways to elicit the response that she needed. She also described talking with detainees and how she had to change the way she spoke, using more slang and casual language. She summarized her experience of changing her communication style in the following way: "It's important to know your audience and who you're talking to and the way you phrase things, so I guess I did enhance my understanding of that kind of communication."



Corinne was significantly influenced by the service-learning course and recognized ways in which her thinking about her communication skills changed, as did her identity as a student and as a citizen, illustrating an increased awareness of her intellectual identity.

### Knowledge of Perspectives and Contexts

Many of the college students interviewed described an increased knowledge, awareness, and understanding of the perspectives and contexts of others through the service-learning experience. The students demonstrated a knowledge of the context of others, which is what I describe as individual decisions based on who individuals are, where they live, and what their experiences have been. This theme, as the other themes, illustrates an aspect of intellectual growth because of the students' willingness to examine a perspective different from their own, as well as to delve further into those perspectives to obtain an understanding of the source to better inform themselves and others. The students interviewed described knowledge of perspectives, including perspectives of other students in their service-learning courses and individuals they worked with in the service setting.

Kristen and Corinne discussed individuals with whom they worked for their courses, and they obtained in-depth perspectives on these individuals' experiences. Before Kristen interviewed the nursing home residents, she wondered why people did not leave New Orleans when Hurricane Katrina was approaching. But after the interviews, Kristen said, "hearing all the different stories of individuals I interviewed made me more aware of what people were going through and their experiences...They weren't trying to persuade me of anything. They were just telling their story." Kristen gained a greater appreciation for the individual who had a limited income, probably did not have a car to evacuate, and came to understand the challenges many people in New Orleans faced before, during, and after Hurricane Katrina. Interestingly, Kristen

stated, “they weren’t trying to persuade me of anything. They were just trying to tell their story.” This part seemed to truly resonate with Kristen. She believed that since the residents were not trying to convince her, they were being honest about their experiences. As someone who described herself as “headstrong” and “direct,” Kristen began to change her perspective and listen more because of her knowledge and understanding of others’ individual experiences and the challenges that they faced.

Corinne, in her experience with the law clinic and detained immigrants, recognized the sharp contrast between her life and theirs; yet, this difference also created a struggle for her given her heritage as both a Salvadorian and an American. She explained,

...it was very interesting because the majority of people were trying to seek like asylum to stay here because of gangs or violence or whatever. That was even more interesting because a lot of the people that I met with were actually from El Salvador. Like I kind of knew that stuff was going on but since it’s not in my reality, I don’t know,...

The stories that Corinne heard from the detained immigrants were at times challenging for her to hear because of the nature of the harsh, violent, or discriminatory circumstances, because of her individual and ethnic identity, or because of her privilege as a college student at a private university. The contrast was obvious to Corinne, but the process by which she studied others, from the detainee from Mexico to me, the researcher interviewing her about her service-learning experience, was developing more and more. She stated,

It’s just something that clicks in your head, oh ok, so this person is from this place in Mexico and this is what happened here, and this is why they’re like this... like the way I speak with you and this conversation, the words that I use with you are going to be very different from somebody who’s from like a rural area in Nicaragua. Just like the concepts

and the contexts of things, so yeah, I definitely think that you learn how to present yourself in different ways with different people.

This reference to “clicks in your head” is intriguing and demonstrates once again a shift in thinking or thought process through the service-learning experience.

Other students, including Sarah, Todd, James, and Kelly, also described knowledge and understanding others’ perspectives and contexts, and yet their examples came from their classmates in the service-learning courses, either through discussions of the readings or the service in which they participated. Sarah, the student who participated in the course that rebuilt the porch for the single woman affected by Hurricane Katrina, recognized the varying perspectives offered by the readings and her classmates about controversial issues and began to study ways in which they might have been influenced to say what they do. She described a time in class where she began to recognize the motivations of the authors of the reading assignments. Sarah stated,

...especially in this course it was a very heated topic [rebuilding New Orleans] obviously and a wide range of opinions, so you really kind of had to like do a reading and then understand what they’re [authors] saying but also understand like what is motivating them to say this...

Here, Sarah not only considered the material covered in the readings and discussion, she continued to assess the writers’ motivations, demonstrating a heightened awareness of others’ perspectives. Eyler and Giles (1999) discussed a similar theme in their section on perspective transformation, specifically a willingness to challenge. They described a student who did not want to “just absorb what you’re reading in the textbook and take it at face value but to think about where the author is coming from” (p. 146). This theme seems particularly important in

the context of service-learning. Yet Sarah, like other students interviewed, took a different direction and began thinking about the context of others in relation to other students. Moreover, she recognized others' contexts as motivations for their comments in her classmates. In the following passage, Sarah spoke about another student, whose response to a reading changed over the course of the semester. She stated that the woman, who was African-American, was from a Northern state and was having a difficult time adjusting to the South. The town from which the African-American student had come was predominantly white; however, she perceived that her race or ethnicity was not discussed or a controversial issue. When she moved to a more ethnically diverse Southern city, a number of individuals inquired about her background, making her uncomfortable. She explained,

the way she felt about bell hooks kind of represented that because she said, like if we never would have known this about her, like we could have had all sorts of misconceptions...so while previously she may have felt a certain way about the bell hooks book, initially she really didn't like it, but once she got into it, she really started to love it. It was just like seeing all the different girls' reactions and why they felt the way they did. It was very interesting.

While some may argue that this type of interaction through class discussions is common, the way that Sarah explained it was truly enlightening for her. Moreover, the service and experiential component linked with the course material heightened her awareness; she began to understand others' ideas more fully because of what they brought to the academic setting from the service experience.

Like Sarah, Todd recognized perspectives and contexts of others, specifically, those of his classmates in the pharmacy service-learning course. The pharmacy students were put in

groups of five or six and those groups went to certain middle school during the semester to teach students about health and nutrition. The schools that they attended included public, parochial, and private. While this structure undoubtedly worked well organizationally, to have the groups go to the same school the whole semester, and pedagogically, so the pharmacy students could establish consistency and a rapport with the middle school students, Todd saw some flaws with this structure. In frustration, he explained,

It's almost like we needed to rotate because some students had simply the most upbeat, intelligent, private school students. It's just like, well I need you to go to these schools, so you can learn because some [pharmacy] students just weren't aware that these situations will occur in the pharmacy or in life; they've been sheltered.

Todd saw the problems with pharmacy students' only having experience with certain types of students and individuals; he wanted students to have different experiences to be better pharmacists, but instead, saw the lack of perspective and lack of context of the reality of the customers that they would likely serve.

One of the students saw how knowledge of perspectives and contexts in the classroom added to her own development. Kelly, a student in the English/gender studies course that rebuilt the single woman's porch, found that she had additional experience with and information about an African-American guest speaker. Thus, her response to that discussion was much different from those of her classmates. The guest speaker was giving a tour of a devastated area of New Orleans, and the following is Kelly's description of what occurred:

I guess she was sort of negative towards a lot of the organizations that came down and mainly young, White volunteers and you know, how they're reacting or communicating with the community...It's just like a touchy thing, and she just is coming from a totally

different viewpoint than of lot of these, a lot of the girls in my class who are from, you know, from out of state and you know, mainly a lot of them have more money or like, they probably wouldn't like be in that area or like be talking to those people if it weren't for the class. So, I don't know. A lot of people were pretty negative. They thought she was maybe racist the other way, you know, and just sort of upset by that, but, like I had met her before and I like worked in that area, so I didn't really think it was a big deal, but I mean things like that I think people just reacted differently to things that are stressful or to you know, things that they have not come into contact with.

When the students discussed the guest speaker's tour in the next class, Kelly, with an understanding about the speaker and about the area in which she had previously volunteered, tried to talk with the students about their lack of perspective. When asked why she chose to talk to the students about the guest speaker, she provided additional information about her own changed perspective:

I figured everyone doesn't have the same information. I think that was one of the best parts of the class. I think initially like the first day just looking around the room, I had conceptions about what people would be like. But then when we started talking, people had amazing stories. Like someone had a daughter, someone's Dad had died, and all these amazing things that you just, you know looking around and not talking to people, you would have no idea. So I mean, I think that helped me to stop, to be less judgmental or just be more open-minded or just to start those discussions.

From explaining the perspective about a guest speaker to realizing her own changes in perspective, Kelly was significantly affected in this area. This theme represented an important

part of Kelly's service-learning experience, and she described it as a contributing factor in her intellectual growth.

James, the student who was enrolled in the political science/economics service-learning course, also identified strongly with the service-learning experience. Because his service included being the service-learning facilitator for another course by providing support to the faculty member and the students while they tutored middle school students in math and science, he was instrumental in its development and execution. James, like Todd and Kelly, recognized the ways in which other students' understood or did not understand perspectives and contexts of others, a process different from and an important distinction from questioning traditional authorities or experts. James described the class as collegial because the professor treated the students as para-professionals of service-learning; their course was more a seminar than a lecture or discussion-based. Like Todd, James saw himself as a student who could share his experience with others given his previous service and experience. When asked about the service-learning course, James said,

It was just kind of like playing with a puzzle that I had already played with before, and um, so it was already kind of there and with me. It was just, great to kind of share it with other people [other students] and have them thinking about these things...

James entered this course with a slightly more advanced framework in terms of service-learning, and while most of the students also had experience, he spoke of a couple of students who were resistant to others' perspectives and contexts. He explained the purpose of the course and the response of one of the students who was strongly resistant to considering perspectives and contexts of others:

I would definitely say it was a direct kind of mission of nurturing a certain type of thinking, of really breaking down and conceptualizing the boxes that we live in and um, removing a lot of those impediments...that method of thinking kept arising, and that person finally just shut down. And um, so because she did not, she couldn't break those walls down, that conceptual framework, that fellowship was pretty much guided towards meeting those, breaking down those walls and a lot of people were afraid of that. And so she just shut down, and she would just interject, any moment she got when anyone would say something that she found moralistically unacceptable.

James recognized this student's lack of development and was frustrated by her unwillingness to see another perspective other than her own. This kind of explanation of what occurred in the classroom, from its purpose to its execution, informed James' understanding of goals and objectives and their correlation to his experience, to his development, and to that of other students.

### The Unstructured Nature and Complexity of Problems

The college students interviewed discussed a range of areas related to their perceptions of their intellectual development and the theme of the unstructured nature and complexity of problems. They tackled the issues that they faced through service-learning, despite their complexity, and began to recognize that many of the problems are unstructured and require an understanding of the role of service in the broader context. Furthermore, with some students who became more aware of the unstructured nature of problems, they also appreciated the cyclical nature of societal problems and solutions, meaning that once it appears as though there is a solution, another problem emerges.



Zelda recognized significant problems in the educational system through the service-learning experience and discussed her realizations throughout the interview. Zelda, who spoke to high school students about gender as well as resources available for college, recognized the lack of service-learning programs for high school students. While her reference point was her own high school experience in a different state, Zelda was aware of the poor conditions of the high school for which she provided service as part of her English/gender studies course. Yet because of her own high school experience, she recognized the value service-learning would have for students and their futures. Zelda found that the high school students became increasingly receptive to the college students' help in a number of different subjects. In response to that experience, she said,

I think if they did this program like for every high school, or not even high school. If they can start as young as elementary school and then from there, start them off, like that would really help as far as motivation, self-esteem, as far as them wanting to go to college and all that other stuff because I know when we went to the high school, most of them didn't even know about scholarships...some of them didn't even know how to use a computer. So like the basic stuff, the program itself needs to be incorporated throughout the university period.

Zelda saw first-hand the challenges in the school to which she went and thought that it needed support from the service-learning program at her university. Her placement of the responsibility on the university coincides with the trend of K-16 educational systems and initiatives for the past 10 years (Viadero, 2005).

Other students recognized social problems beyond the service environment in which they participated and found the on-going questions that were generated by themselves, their

professors, or their classmates challenging to resolve. James explained this notion succinctly when he described the challenges with participating in service-learning, such as the new and unpleasant realities faced, individuals' suffering from burn-out or having a feeling of helplessness, or understanding one's own limitations. He explained, "...it's learning constantly that there are always going to be problems to new solutions." Eyler and Giles (1999) examined a similar concept in their discussion of critical thinking. They wrote, "they [students] understand that their awareness that the more they know, the less certainty they have is a positive insight rather than a defect in themselves or society" (p. 100). While Eyler and Giles focus on students' being less certain about their experiences or ideas, here, James recognized the cyclical aspect of service-learning. When individuals think that they have resolved an issue or problem at their service-learning site or helped with a social issue, that solution will either lead to another problem or there will be another problem waiting to be addressed. James' observation demonstrated his realistic and informed approach to service-learning and provided evidence of his intellectual development.

Sarah described her experience with additional challenges in a more individual way. As the members of her English/gender studies spoke about the history of women in construction and the role of women as rebuilders in New Orleans, Sarah was fascinated by, but grappled with the varying perspectives and ideas. She explained,

I just don't feel like for such a complicated issue that anyone can say with absolute confidence that they are right...The more I learned, I just, well like I said, I'm so indecisive and I didn't used to be, but that probably was not a good thing because I wasn't fully thinking. I think, just so many different opinions, I feel make it harder for me

to express that... I think with that awareness you kind of realize how complicated things are. So it seems to make things harder.

With additional information, Sarah struggled to convey her thoughts and ideas. She, too, recognized the unstructured problems and the complexity of solutions, but her experience involved sorting through the perceived solutions.

Similar to Sarah, Kristen spoke about dealing with a variety of issues and finding ways to resolve them. Kristen discussed problems and solutions brought up by her professor in the public speaking class. She described him as thorough with the material and explained how he created an environment where students made connections between interviewing individuals and applying that experience to their speeches. But she also said, "He would talk so much and in so much detail that we would become confused. This confusion would then lead to class discussion." Just when the students thought they understood the concepts, they were brought to another level of thinking, which forced them to question those "solutions." Eyler and Giles (1999) discuss this process in their section on critical thinking: "...this experience of frustration may place students in the position to develop the skills and abilities..." (p.101). They refer to the "frustration" as a student's awareness that there are no simple answers to the social issues encountered through students' service-learning experience. I found that these students recognized the gravity of the societal issues, but saw the cyclical pattern of problems leading to solutions, which in turn lead to new problems. In Kristen's experience, the confusion was a way to elicit additional discussion, adding depth to the process of identifying solutions and problems with the service and the subject matter.

The issue of unstructured and complex questions led Kelly to take action and explore those questions further after the service-learning course ended. After Kelly and her classmates

struggled with difficult questions about rebuilding New Orleans, she remained unsure of the answer. She explained,

...the class still left me with a lot of unanswered questions, like especially about the topics we discussed. You know, like problems in New Orleans, the education system and the levees...if it should be rebuilt or not. These are just things that weren't really resolved. And maybe they're not going to be resolved.

Kelly took the information that she learned and the perspectives of the guest speakers and students seriously; she wrestled with these conflicting views, leading her to recognize the importance and value of taking action. She explained,

...it [the class] kind of did create more questions than I had before. I feel like maybe I can't just you know, when I finish [name of university], I just can't graduate and do something else and not, you know, not think about these things anymore... I feel more responsibility to answer these questions, like find answers, or at least, help find answers.

Kelly became aware of the complexity of the problems the class faced and chose to deal with them through action, both through the service in the class and beyond it, beyond her university, and beyond graduation. Like the other students, Kelly realized the intricate nature of problems and solutions with which she dealt. Unlike the other students, Kelly decided to act on those unanswered questions.

#### Global Interpretations of Service-Learning

The final theme that emerged from the interviews addresses college students' global interpretations of service-learning. Their perspectives on the relationship between service and larger social issues and between their academic experience and their individual lives demonstrates a broad understanding of service-learning. Through the service-learning

experience, many of the students, including James, Corinne, Beth, Rachelle, and Kelly, articulated a global perspective on the work they were doing and the links between academics and life.

James spoke broadly and philosophically about his life and service-learning. He identified strongly with being a leader in the service-learning community, an identity that transferred to other areas of his life, including his academic work and future career. He explained,

I think it [service-learning] has affected every facet of my life...I don't separate you know, getting my bachelor's and going on to the work I will be doing. It's developing part of me now and you know...*I'll always be in a sense a service-learner.* (emphasis added)

James discussed his connection to service-learning in a way that showed that the experience had a lasting impact on him. With this perspective and the ability to communicate it in this way, it is evident that James is not only aware of the impact of service-learning, he incorporates it in his life to better understand his role in the community of which he is a part. He discussed ways in which he resolved conflicts between the way he thought and what he was learning in college through the community when he slowly said:

...the thinking process [through service-learning] really helped me break down a lot more of those moralistic values and see them for a value I can live with and you know, I can look at issues that are controversial and not be afraid of tackling them regardless of differing opinions, or our shared humanity. It really helped me. I think it was kind of like the capstone, and I don't mean really the capstone, but it was really defining moment in

really piecing together my thinking of breaking down those walls...really working in the community and really getting kind of, a global perspective on life,...

James took the service-learning experience and began, not only began to learn more about himself and his role in the community, but also to study his perceptions and ideas, growing more as an individual who can resolve what he had been taught and what he believes to be true. In addition, his views are broad, inclusive, and global, and he analyzed his changes of perception in a way that is sophisticated and insightful.

Kelly also spoke about her experience with service-learning in relation to academics and her life. She recognized the relationship among these areas as she continued through the course and the rebuilding of the woman's porch in New Orleans. More specifically, the experience taught her that academic learning and intellectual development could assume many forms. When she spoke about the requirements for the class, she observed:

Like our final projects, we could do whatever we wanted so some people wrote research papers, and some people made art projects, and some people did like presentations or built things so the academic work wasn't...it wasn't, I guess, as defined as it is in other classes. So, like it didn't feel less academic, but it just felt maybe the academics could be more than one specific thing. I mean, I guess as long as we were learning I wouldn't necessarily say it had to be academic or like personal or public service. Like it all sort of goes together.

Like James, Kelly became aware of the fluidity of the academic experience through service-learning. When she said, "it just felt maybe the academics could be more than one specific thing...", she demonstrated that her thinking had become more open and more global. She also recognized the relationship among academics, service, and her life as a way to truly understand

its impact on her and on her intellectual development. Moreover, the idea of taking action because of her service-learning experience was also evident in this theme. The service-learning class influenced her in a way that no other class had in the past. Instead of taking the information for the test only, Kelly wanted more from the knowledge. She spoke in great detail about putting the information “out” and placing it somewhere externally, as opposed to keeping it for herself. She stated,

I feel like I forget a lot of what I learned and it doesn't really go anywhere. So I guess I just want it to go somewhere. I think one aspect of the class I liked was that we did so *many things* and it had so many parts to it, and I feel like it was really difficult and um, to just integrate those things. Like maybe that was the challenge of the class and like doing our projects. I was challenged like to bring things together in my mind, um, with the impact of all the different things that we had done were on me. Um, so I guess I feel more, more challenged to just integrate all the different aspects of my life and like all the, I don't want to just like be, go to work, and go to school, and like live in the city. I want it to like come together in some way and have some sort of purpose outside of myself, so I think that was there before, but it just sort of feels more important and more I guess, like more serious because it was taken seriously in that class. Um, it's just like out of my head.

Here, Kelly articulated the way in which she made connections with the material in class, the service experience, and her life, in a way that was similar to James' formulation. Unlike James, however, she took that development in a different direction when she recognized the importance of doing something with this newfound knowledge. Not satisfied with having the knowledge and

experience, she wanted to take some form of action by defining a purpose for herself and her role in the community.

Beth, through her interviews with nursing home residents learned a great deal about Hurricane Katrina and the way in which it affected the lives of so many individuals, as well as its impact on the community and larger society. She began thinking about and became more cognizant of the world around her. When speaking about her service-learning class and the interviews she conducted, Beth said,

I understood why people wanted to stay on top of it [Hurricane Katrina] because it was so big and you know, it was, you know, something that changed people's lives basically. You can't just have that happen and throw it out and never discuss it, you know... it made me more aware of different events that were happening outside of my environment...It made me, you know, just become more aware of the country and of the world and how things are run or maybe become more politically aware too about certain things and um, and it made me just learn more about you know people in general...

Beth's perspective thus opened significantly, from thinking about her own life, not affected by Hurricane Katrina, to others who were, to the value and importance of continuing to discuss and analyze the event, effecting change in one's mindset and priorities.

Two other students, Rachelle and Corinne, understood service-learning more globally and made important connections between academics and life through their service-learning experience. They illustrated this relationship through theories discussed in the classroom. While the other students demonstrated their expanded understandings through examples in the classroom and their lives, Rachelle and Corinne exhibited this global perspective through the theories addressed in the service-learning course.



Throughout the course and tutoring of school children, Rachelle identified strongly with Vygotsky's social learning theory, in which children's learning and cognitive development depends on social interaction (Taylor, 2008). Rachelle found this theory for elementary-age students convincing and saw parallels to her own service-learning experience, which included working with peers. She described her pedagogical philosophy and role as teacher as follows:

...this is the theorist I believe in, so I was like maybe I want to set my classroom up where the kids can help one another. You know, I'm going to be the teacher but I also want to facilitate. You know, I don't just want to give y'all information and y'all just answer questions. I want to give y'all things you can do, hands-on, and then if you have questions, come back around. You know, just me feeding information is not going to mean you're going to learn anything but if you're actually doing it like if I was for service-learning, taking what I learn in the classroom and using it, it'll stick with you.

Take it, do service and what you learn in the classroom, bring it out and see it.

For Rachelle, taking the service-learning experience and relating it to her teaching philosophy enabled her to see both from a new and broader perspective. They not only worked as separate entities, but, when brought together, Rachelle's view on service-learning and her teaching methods were enhanced, giving her with a more comprehensive perspective on experiential teaching as well as learning and education overall.

Corinne also spoke about the relationship among her learning in the classroom, the importance of applying that knowledge to a real environment, and a setting where one develops a broader, more global perspective on the issue. When asked about how she would address some of the challenges with immigration, Corinne responded,

There's just so much bureaucracy, and so much politics involved. I mean I understand it because that's what I've been studying forever, but I think it's something that needs to become bipartisan and it should become something humanitarian. You know, shift away from you know, the economics or the politics and look at the actual human element of what's going on, not just through immigration, but you know, the conditions in Latin America, the conditions here. I mean, there's a vast amount of poverty here in the US, as well.

When Corinne applies the issue to the “human element,” she is looking past the political and economic, yet comes back to these perspectives when illustrating the realities in Latin America and the United States. Corinne presented a variety of valuable perspectives when describing the problems with immigrant detainees, the judicial process, and the economic and political situations in Latin America, the United States, and Asia. She demonstrated a thorough and well-rounded understanding of the issues surrounding immigration and immigration law, developed in the courses that she took, and of how that material interacted with her experience with the law clinic. Thus, like Rachelle, Corinne's perspective broadened and opened significantly when she connected the various ideas that she examined to a humanistic concern about the issue of immigration.

These themes—the questioning of authority or experts, communication skills and audience, knowledge of perspectives and contexts, the unstructured nature and complexity of problems, and global interpretations of service-learning—enable researchers and practitioners to examine new aspects of college students' perceptions of their intellectual development. The college students demonstrated some characteristics of learning and development previously examined by researchers such as Eyler and Giles (1999); yet, they also discussed other examples

of intellectual development, which will be examined further through the lenses of college student development theorists, Perry (1999) and Chickering and Reisser (1993), and through a historical context provided by Horowitz (1987). Explored in these new ways, these themes will provide a richer understanding of college students' intellectual development through a service-learning experience, one that considers the individual characteristics of college students. Using these themes as a context for understanding their service-learning experience, this study will also illustrate the how understandings of the characteristics of these groups change when intellectual development theories and service-learning are considered. The description of the college students' transformation is also discussed in relation to certain themes, illustrating the correlation between the intellectual changes that occur for each group of students and the themes that emerged from the interviews.

#### Transformation of Horowitz's Groups of College Students

Each group of college students—insiders, outsiders, and rebels—transformed through their service-learning experience. Some of the ways in which they were affected correlated with the essence of their groups' characteristics, and other, new qualities of the groups emerged through service-learning that had not been evident historically. The following section demonstrates how these groups evolved and developed differently than they had in the past due to service-learning experience, an opportunity for college students that had not been examined with Horowitz's groups historically. Furthermore, the participants' positions of intellectual and identity development follow each section of transformation, and provide relevant details regarding their levels of development based on Perry (1999) and Chickering and Reisser (1993).

### Insiders and Their “Peers”

Given the insiders’ attention to the peer relationship with other students, it was not surprising that through service-learning, they developed a “peer-like” relationship with other groups: faculty and administrators. All of the insiders viewed their professors and university administrators as peers, as opposed to superiors or mentors. They described their relationships with faculty and administrators as those of co-workers, individuals with whom they shared ideas and from whom they obtained feedback, but also as individuals that they themselves guided. For instance, James explained that he and the professor he worked with for the service-learning class “bounced ideas off each other and communicated very well” and one of the expectations of the course was to “find a working relationship with your professor.” Melissa volunteered in the department which organized the service-learning component of the pharmacy class. She believed in the benefits of the program and was excited about the opportunity to be a part of this new development. Her involvement in the department led her to take significant ownership of the development and execution of the service-learning opportunity, even referring to it once as “my program.” At times, she found it interesting “to see my classmates grow.” Other times, in frustration with students’ questioning the role of service in the class, she stated, “This is why I am presenting it [the service-learning experience] to you, as a means to help you along in your career.” Melissa’s leadership skills contributed to this perspective, as did her recognition of the program’s value and her role in its execution; she wanted it to succeed and benefit the pharmacy students. Finally, in Robert’s leadership position in the university’s student government, he and other student leaders met with the new dean of his college about architecture as a “social mechanism or social catalyst.” These kinds of conversations with university administrators had become more common with insiders and allowed an opportunity for these students to have access

to administration and for the administration to maintain connections with the student body.

These connections to faculty represent a new development, one that is established and carried out through the service-learning experience.

Examples of this relationship between insiders and faculty and administrators are striking. Insiders, originally hostile to faculty, gained strong support from administrators in the early twentieth century, according to Horowitz (1987), and, more recently, have developed a peer relationship with them through the service-learning experience. Insiders have transformed through the service-learning experience; their development occurs not only through their relationship with peers, but also with faculty and administrators. Through these connections, they grow in a way that entails components of their intellectual development, but mainly their identity development, as described by Chickering and Reisser (1993).

Given this focus on peers and the leadership experience insiders already possessed, it was challenging at times to elicit information about their service-learning experiences and perceptions of their intellectual development. Insiders prioritize the peer and social experience of college over the academic experience, so although a number of the interview questions posed related to the academic areas of the university and their perceptions of their intellectual development, these areas were not of interest to most of the insiders. While James was able to convey those academic experiences and their impact on his intellectual development, the other three insiders, Robert, Melissa, and Todd, showed that the experience was generally positive but suggested that they did not gain much intellectually. They believed that they were already bringing experience to the course, so their development in that context was limited. Instead, they emphasized the impact on their classmates and the changes they saw in them, as described above with respect to Robert, Melissa, and Todd.

### Insiders and Their Identity Development

Using Chickering and Reisser's (1993) identity development theory provides a new perspective on insiders and the influence of service-learning on college students more generally. The students characterized as insiders in this study demonstrate that they have gone through many of the seven vectors of Chickering and Reisser's theory when they spoke about their service-learning experience and ways in which they have grown or changed during their college years. Given their engagement with other students, faculty, and members of the community and their participation in the service-learning courses, which provided unique experiential learning methods, insiders developed in a variety of ways. From acquiring skills and new knowledge, to navigating a different environment with individuals unlike them to having their ideas, opinions, and values challenged, these insiders underwent new kinds of changes. In the interviews, the insiders provided evidence in some form for all of the seven vectors identified by Chickering and Reisser, but there was *strong* evidence for three of the vectors in particular—developing competence, moving through autonomy towards interdependence, and developing purpose. Also, one insider demonstrated that he was working through the vector called “developing integrity,” which is important because it illustrates a more advanced form of development and correlates in an interesting way to service-learning.

The first vector, developing competence, includes three areas, which are known as the “three-tined pitchfork”; providing the foundation for the other vectors, it includes intellectual competence, physical and manual skills, and interpersonal competence. Robert, the architecture major who was involved in recording historic homes, demonstrated evidence of both intellectual and interpersonal competence. Although he stated that the course material did not strongly correlate with the service, he highlighted the practical experience of identifying different styles

of houses and buildings, thereby demonstrating his intellectual competence. Robert also explained that he obtained his responsibility in the service-learning course, which included recording the various houses through photographs and writing a first-person narrative about the experience to be published in the neighborhood association newsletter. Because he did not want to enter data, he spoke with the professor about other options, and together they decided upon the narrative in the newsletter, showing Robert's interpersonal competence. Robert's initiative and ability in negotiating requirements for the courses with his professor illustrates strong interpersonal skills. Moreover, he was able to convey the value of the first person narrative to his professor and communicated his perspective on the service-learning experience to the neighborhood association, illustrating once again, his ability to communicate well, work with others, and navigate and respond to various environments, both the university and the community.

Melissa and Todd also provided evidence of developing competence, mainly in the area of interpersonal competence. Melissa gave an example of how she recognized the importance of the service-learning course, but many of the other students questioned it. She took the following approach:

I look at situations and saw ok, here's a situation, what can I get out of it, what am I going to bring to it. That's how I deal with it and, I think that if everybody approaches it that way, then it'll be beneficial because even sometimes there are situations where you're going to be putting more into than what you will receive.

Todd also recognized the value of working with and learning from others through the service-learning course. He stated,

I think this ended up being the most important reason for the venture, which was, we were to have an understanding as pharmacists or whatever occupation we choose...you're going to interact with a number of people over the course of your career. Their focus was on the recognition and development of interpersonal competence. While all of these students described the acquisition of valuable skills and practical experience, their attention was on the development of interpersonal competence. This priority of connecting with peers and, as demonstrated above, with faculty, here relates to their identity development. These insiders' focus on communication and interaction parallels the vector of interpersonal competence.

The second vector that emerged in the interviews with the insiders was moving through autonomy towards interdependence, when students begin to trust their own opinions, understand the impact of their decisions, and find the balance between being independent and a member of a group. James' responsibilities related to his service-learning course including negotiating various roles with his own professor, the professor with whom he collaborated, and the undergraduate students he mentored in the service-learning course. While navigating the multiple relationships were important, this experience forced James to balance his role as a student in a course, as a "peer" to a professor, and as a guide to undergraduate students younger than he. James described his work with undergraduate students:

I um, brought myself into the class and made sure I was known to my students and emailed them...I personally emailed every single one of them twice throughout the semester, let them know their progress, and how things were going. Um, to really keep up the morale because I've seen um working with [campus service-learning department] most of my academic undergraduate career. I learned how it's a very inefficient program



and faced with the fact that all new undergrads are required to do service-learning, it's um, a big feat to make sure that students are supported.

In addition to his multiple roles for his service-learning course, James was also highly involved in and believed in service-learning and was connected to the service-learning staff members at Research University. Nonetheless, he recognized the imperfections of the department and strove to find the balance between doing what he thinks is right for the younger undergraduates and being a "member" of the service-learning department. For a senior, these expectations were high, but James handled them well, providing evidence of his ability to move from an autonomous college student to an interdependent individual.

"Developing purpose," the third vector of Chickering and Reisser's (1993), is illustrated in these interviews with insiders. It includes decisions that students make about their vocation, personal life, and family life. Robert said that the service-learning course "...just made me more aware of what's going on. Kind of furthered my commitment to do as much as I can." Also, Todd described the decision he made about which career path in pharmacy to take and the struggle between retail pharmacy, on the one hand, and research in which he believed, on the other. After explaining the financial benefits of working in retail, Todd said with certainty, "...you have to decide what's more important, and what's more important to me is the HIV research." Finally, James connected his strong identification with service-learning with his future position with AmeriCorps VISTA.<sup>2</sup> While he appreciated the opportunity to continue to work in a field for which he felt significant interest and passion, James' sense of purpose is

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<sup>2</sup> AmeriCorps VISTA is a program within AmeriCorps that works specifically with issues surrounding poverty and is a one year commitment at a non-profit organization or government agency. VISTA volunteers receive living expenses as well as health care benefits. After completion of this program, volunteers receive funding for an education award or general funding.

reflected in his statement, “I’ll always be in a sense a service-learner.” It also reflected insiders’ clear sense of purpose in terms of their roles professionally and as members of society.

The last vector discussed is “developing integrity,” which builds on students’ value systems and guides their behavior (Chickering & Reisser, 1993). According to Chickering and Reisser, given the values that college students bring with them and the experiences that they have in college, developing integrity can include “an affirmation of values that have ongoing relevance, a search for new ways to interpret complex realities and reconcile discordant perspectives, or a substantive shift away from old values” (p. 235). Although James was the only insider who provided significant evidence for this vector, it was important given the complexities associated with this vector and its correlation to some of the themes generated from the interviews. James explained how his value system changed after coming to college and working in the community:

I used to be very religious, coming from [hometown]. And a lot of it was moralistic and I you know, being here in [city of Research University], at [name of institution], and really working in the community and really getting kind of, a global perspective on life, I realized that there is an interest in, you know, connecting humanity but, that those moralistic walls that would prevent me from doing certain things and not trying or capitalizing on opportunities. I really broke those down.

Through James’ experience in college and in the community, he developed a more global perspective on issues and generated a strong interest in and identification with service-learning. Believing that service-learning enabled him to make more connections with individuals and become involved in efforts he would not otherwise have encountered, James provided clear evidence of the process of developing integrity.

The insiders were transformed through the service-learning experience in a number of ways, yet the focus of their transformation remained largely in the realm of their identity development, with aspects of intellectual development. While their descriptions show that they did go through some form of development, insiders' development remained in the areas of developing competence, moving through autonomy towards interdependence, developing purpose, and developing integrity (Chickering & Reisser, 1993). Their service-learning experiences provided them with opportunities to expand their views of the peer relationship and to be more open to perspectives other than those of their peers; hence, their transformation is intellectually based but is manifested through their relationships with others.

As traditional student leaders, they continued to take that role in service-learning setting and were often selected to take more responsibility because of their leadership experience. This role was reinforced and enhanced with service-learning as a component of their academic experience. Also, as service-learning was a part of their curriculum and incorporated in their coursework, the insiders brought their characteristics, typically applied to the co-curricular setting, to the courses. Thus, their priority of the peer relationship was transferred to their student-faculty relationship, and they began to relate to and see their professors as peers.

This behavior corresponds with a theme that emerged in the interviews—communication skills and audience. Insiders began to consider relating to various audiences, including their professors, and to rethink their role in the curriculum. This theme enabled insiders to take on a new role in their college experience. They established a new position in the academy through service-learning as an active participant who related well to various groups, including those in the traditional academic arena. The shift in focus from leader/student to student/leader allowed them to place more attention on faculty and their relationship with them. This new relationship

expanded their awareness and understanding of their perspectives and of faculty as potential peers.

### Outsiders and Their Expanded View

Outsiders spoke in-depth about their service-learning experience in relation to their course work and their perceptions of their intellectual development. Given their interest in faculty approval and support, it is evident that they would focus on their growth as individual students and intellectual beings. Yet service-learning also provided a new opportunity for outsiders to gain insight and information from their peers, a group that historically had not been a significant factor in their college experience. Because of the service component and the group discussion in the course, outsiders were forced to adapt to this new curriculum to continue to be successful academically and to obtain praise from their professors. Through this experience, outsiders began to recognize the benefits of looking to peers for information and guidance, a new development which also contributed to their intellectual growth. Furthermore, through the service-learning experience, these outsiders also became more confident about their strengths and learned to rely on themselves for confirmation of their abilities.

A number of the outsiders developed more of a relationship with their peers. They began to see how their peers influenced their experience and how their peers understood the course material. Less dependent on their professors for the answers or guidance, these outsiders adjusted their perspective to include peers as viable sources of information. Sarah, in the English/gender studies course described how the service-learning course was a “bonding experience for all of us.” She also explained the way in which her connections to other students affected her thinking:

There were a lot of different types of girls and then there was the one guy in the class and it was just a lot of different opinions and we had a lot of discussion in class... It was like

we read some stuff that like not all of us agreed with and it was very controversial so I don't know. It was very interesting, and I think it kind of opened my mind a little bit. Focusing on these kinds of experiences in recognizing the impact of one's peers on one's perspective and understanding the material and the issues is a new way of studying the outsider. Through the service-learning experience, outsiders are changed and challenged in a different way, affecting their views, ideas, and their intellectual development.

Beth also spoke about her openness to peers' viewpoints and opinions through the public-speaking course, but focused more on her ability to convey her points to her peers. She stated that she changed from the beginning to the end of the semester and saw the differences in the way she communicated with others. When she spoke about what she learned from interviewing, she said,

...even if it wasn't an interview, if I wanted to ask questions, I learned how to read maybe a person's facial expressions or body language and be like, ok, maybe they don't want to talk about that or if they say something, it's like ok, go to the next subject or let's go deeper into this. You know I learned how to do stuff like that. If we weren't doing the interviews, I may have not learned that...

Her shift in attention from the professors to other students as well as individuals in the community enabled her to develop another set of skills, which will help her develop in a variety of settings. Beth also explained that these skills enabled her to make her points in the classroom setting with her peers:

...at the beginning I thought that was something that I couldn't do was just talk to people whether I knew them or not about different topics or whatever... I learned all about that

and it kind of helped me be better at speaking basically to others and how to convey my points and stuff like that by the end of that class.

Beth's peers became important and more a part of her college experience. Through the interview experience, she recognized verbal and non-verbal cues in others. Having this awareness enabled her to understand effective ways to communicate, and equally important, to express her perspective in a clear and convincing way to her peers in class. The outsiders in this setting became more open to various groups besides their professors. Moreover, they began to take into consideration the community and its members as a part of their academic experience and to look beyond intellectual engagement through the traditional university setting.

In addition to outsiders developing interests in the peer relationship, they also transformed by becoming more confident in the academic and social campus settings. Zelda changed from an outsider who focused on her work as an individual student to an outsider who incorporated other students in her work to enhance her experience. When she spoke about working in the group that spoke to the middle school students about gender, she said that she was the type of person "to observe people and how they interact with other people...fade in the light." She recognized that she had to make changes to be successful in the service-learning class: "I know I'm going to have to get over that because now I'm going to a setting where I have to be the person who talks to the [middle school] students and like get them out of their shell." While not all outsiders are reluctant to speak in front of groups, they tend to focus on their roles as learners and to be receptive to information and knowledge, mainly from faculty. Yet in instances like this one, Zelda's outsider qualities transform and assume a position of standing, power, and confidence. She becomes the source of knowledge and has the ability to convey that information to others.

Rachelle also spoke about changes in her level of confidence through the service-learning experience. Instead of seeking approval and support only from her professor, Rachelle began to learn to depend on herself. In the beginning of the interview, she questioned if she could do this service successfully, but as she tutored students in reading and saw the benefits of her instruction, Rachelle's confidence grew. She explained, "I kind of took the role as if I was actually the teacher and not the student in class just helping out the students." Rachelle also emphasized soon after that observation that "I've got to learn to stand alone." While some of the outsiders sought information from their peers in the course and the service experience, Rachelle evolved by becoming a more confident outsider, one who was certain about her skills independently of the professor or other students.

Ellen, an outsider in the environmental sociology class, also discussed increased levels of confidence as she collected and analyzed data about residents' recycling awareness and habits, eventually presenting that information and suggestions to the Board of the grassroots environmental organization:

It was helpful in that a lot of them [Board members] asked questions and you know, you felt knowledgeable on the situation because you were there, getting information, so that was good...it was more like I'm presenting on something that I know about because I was part of it.

Although still an outsider in the sense that she is receptive to learning from those with more experience and knowledge, like faculty, Ellen began perceiving herself as "knowledgeable" and the expert on the material she gathered and presented. Ellen's perspective on herself and her contributions to others changed throughout the course. In addition, she demonstrated her willingness to work with other students to reach a conclusion, rather than focusing so heavily on

the response from her professor. Here, she described negotiating the information to discuss with her peers in the class:

...when going over what we should present and coming up with our final report, we all decided that when we're saying this, we should also qualify with this. So I think it was kind of a collective thing. You know, we sat down and discussed what was going on before we wrote it up...everyone's in it to learn together, and to bounce ideas off each other...

Ellen was influenced and changed in both ways that outsiders are typically changed. First, she began to see her peers as viable sources of knowledge and collaboration instead of concentrating solely on her relationship with the professor. Second, Ellen's confidence grew in a new way for a typical outsider because of her experience as one of the few presenters of the data that she and her classmates gathered and analyzed. Becoming the "expert" and the individual others came to for information enabled her to recognize her own strengths, rather than relying solely on the feedback and reinforcement of her professor. Ellen, like the other outsiders, opened her perspective in a new way by including others in the process and demonstrating her strengths to a wider audience.

Each of the outsiders in this study, Ellen, Sarah, Rachelle, Brittany, and Zelda, illustrated their abilities to articulate and describe many of the intellectual goals of higher education, as defined by Eyler and Giles (1999), yet other aspects of their development required further examination. Through the service-learning experience, the outsiders were transformed intellectually, changing some of their priorities and values as college students. While many of the insiders maintained the importance of the student-faculty relationship and their academic pursuits, a number of them began to see peers as viable sources of information and to build



academic confidence in themselves. This shift demonstrates a new and enhanced perspective in regard to their academic career, one that is more open and inclusive; this transformation provides evidence for their intellectual development, which will be discussed further through Perry's (1999) theory of ethical and intellectual development.

### Outsiders and Their Intellectual Development

In view of outsiders' focus on academic engagement, Perry's (1999) theory of intellectual development will be used to examine their positions of development. This will enable me to better understand the way in which they have developed intellectually and have changed in this respect through the service-learning experience. This study will describe Perry's theory of intellectual development in four main positions—dualism, multiplicity, relativism, and commitment to relativism—and all of the outsiders in this study provide evidence for being in the positions of multiplicity or relativism, or somewhere in between the two positions. Also, some outsiders underwent significant changes that affected their traditional priorities, illustrating the impact that service-learning had on their academic experience and their intellectual development.

Perry (1999) described "multiplicity" as a situation in which students accept varying opinions, yet also think that all opinions are "correct," even though there may be more evidence for some than others. He wrote, "...in the domain of Multiplicity, where answers as (as yet) unknown, the epistemological and moral law will read, with equal absolutism, 'Everyone has a right to his own opinion'" (p. 107). While a number of the outsiders spoke about situations in their service-learning courses in which they displayed multiplistic characteristics, some recognized to a certain degree that varying opinions or perspectives were not all valid. For example, Beth and Zelda, both students at Teaching University, showed that they were in the

multiplistic position and yet were beginning to recognize the value of some perspectives over others, thereby hinting at the possibility of moving towards relativism.

Beth, the student in the public-speaking course, spoke about changes in her communication skills; these examples also illustrated the position of multiplicity, because her focus was on developing communication skills and learning from others' perspectives to broaden her own rather than merely critiquing information. Beth stated,

...just talking to other people, you learn about what you think about a certain event or situation just by learning about what that person's perspective is... You become more open to other people's perspectives and you know, how they feel about things and you may feel differently about and you guys may not agree on something but you know, it's ok and the communication between you and someone else improves.

Zelda, in the English/gender studies course, also spoke about communication skills and the connection to being open-minded. She described situations in which she and another person would disagree:

I'm very open-minded. You can tell me your side of the story and whatever you have to do to convince me, but I'm still going to have my opinion, so with me, you can tell me about anything. I'm open-minded. I'll sit there and I'll listen but that doesn't mean I have to confirm to what you think. Because I'm an individual and you're your own individual.

Zelda's perspective correlates with the position of multiplicity, because while she is willing to listen to another person's opinion, she does not give any evidence that she would waver from her perspective.

The other two outsiders interviewed, Ellen and Sarah, both attended Research University and provided information about their service-learning experiences in a way that suggests that

they are in the position of relativism. Students at this point move towards more independent thinking and begin to distinguish among opinions and perspectives that are valid and grounded in evidence and logic. Ellen, in her environmental sociology course, began to see the nuances of data collection and analysis, illustrating that she is in the position of relativism:

You know you're able to see that not everything is an exact science. That (laughter) you maybe think it would be. So you come to appreciate the difficulty in collecting this information. I think I kind of just accepted statistics before and now you learn to take it with a grain of salt and to maybe examine it further...

Sarah also recognized the subtle complexities in the research she was reading for the English/gender studies course. She was increasingly aware of the relationship between the readings and course discussion and the importance of considering the complexities of individual perspectives. She explained,

Yea, um, I mean, especially in this course it was a very heated topic obviously and a wide range of opinions, so you really kind of had to do a reading and then understand what they're saying but also understand like what is motivating them to say this.

The motivating factor here is similar to Ellen's questioning of data collection; they are both thinking about the information that is behind the surface, exhibiting the relativist position of intellectual development.

Rachelle, who tutored elementary school students in reading, was between the positions of multiplicity and relativism. While Rachelle relied strongly on her professor for guidance and valued various opinions, she also saw the validity of one structure over another in her requirements as an education major after she completed the service-learning course. In addition

to service-learning, Rachelle was also required to complete “field experience” for her curriculum, and yet, according to her, the term was misleading. She said,

[Name of her professor] loved to attach the service-learning piece to it [course], so you can actually take what you learned and bring it to the class [elementary school class] as opposed to some other instructors like, just go observe, and that’d be it... Some people call it service-learning but they’re not actually doing the service-learning piece.

Based on most of the information she provided, Rachelle seemed to be in the position of multiplicity; however, moments like this one show her beginning to evaluate and assess critically her various course experiences as an education major, providing evidence of a more complex position.

The outsiders in this study were transformed in unique ways through their service-learning experience and exhibited intellectual development changes. While a number of the students demonstrated characteristics of traditional outsiders, including identification with faculty and strong interests and values associated with academics, many were affected by service-learning in new ways. For instance, they began to be more open to peers as offering important perspectives that could add to their understanding and knowledge, and they gained confidence in presenting information and experience that they acquired through service-learning. In view of the changes that they experienced, the two developmental positions that they most commonly demonstrated in the interviews were multiplicity and relativism (Perry, 1999).

These characteristics reflect two of the themes generated from the interviews. First, they are consistent with the theme, the questioning of authority or experts, which correlates with the changes that occurred with outsiders. Given their new interest in seeking other perspectives besides those of faculty, it is important to note that they are willing to broaden their experience,

include new perspectives, and potentially challenge those individuals whom they had formerly revered. These changes demonstrate important parts of outsiders' intellectual development and the impact of service-learning on that development. Second, outsiders' characteristics are consistent with the theme knowledge of perspectives and contexts due to their interest in having a more complete understanding of the information they gather, the perspective in which it is presented, and the context in which it was developed. These students not only grew intellectually through service-learning, they also, because of their intellectual growth, grew personally by gaining confidence in their ideas and their own perspectives.

### Rebels with an Outlet for Activism

Besides rebels' main characteristics of concentration on their individuality and the community outside of the Ivory Tower, they also bring an activist sensibility to higher education. This awareness of, attention to, and involvement in the community mirrors the priorities of service-learning, which provides rebels with a university-based outlet for their interest and values. Horowitz wrote, "The iconoclasts brought a new spirit onto campus, insisting that students confront the conflictual issues of the broader society" (p. 96). Service-learning can also challenge college students to rethink previously held beliefs, based on the theme of questioning authority and experts; at the same time, the experience can also force students to grapple with the problems and realities they observe or participate in through service-learning. Likewise, rebels had generated discussions, both historically and in the present, about problems in society, the community, and the campus.

The service-learning experience challenged each of the rebels in this study, instigating action on their part, or else they recognized the importance of questioning established structures. For instance, Kristen explained, "I came to college to get an education, but that's not what I got."

With Kristen's experiences, she was forced to "step outside of my comfort zone because I had never done service work with elderly or through interviews." The experience that Kristen obtained outside of the classroom and the university enabled her to recognize that she could be a part of the campus community and still establish herself as an individual with a voice who can challenge ideas and action, as well as form her own structure, as in the case of the student organization that she initiated.

The English/gender service-learning course in which Kelly was enrolled also exposed her to opportunities in the external community and enabled her to determine what role she should take given the challenges she faced as a student at Research University. She said, "I don't really feel like I relate to the ethos of the whole place. I feel like when I think of [name of institution], I generally think of fraternities and drunken students and materialism and things like that." Kelly, aware of her difference in interests and priorities, recognized through the service-learning course that it "...sort of made me think, what should I be doing? What else can I do?" Kelly said she did not see herself as an activist, but stated, "I want to." Nonetheless, this rebel still identified with and understood the value of taking an active role in the community to effect change. Kelly said:

You know doing other things and having our academic work go to some other focus, you know like leave the classroom. I really like that....what we do in the classroom is mainly, it seems like for ourselves you know? Like it just sort of stays in and we write our papers and we learn things for ourselves but it just doesn't, you know, it's not really for anyone else or for anything else. So I just like the public service classes because ...I think that it goes somewhere.

This attention to the external community demonstrates Kelly's values as a college student, and service-learning provides her with an opportunity for exposure to and involvement with the community. It also gives her an outlet to use her knowledge and ideas to take action.

Corinne was also interested in taking an active role in the community, and her service-learning course provided a venue for that pursuit. It also enabled her to see the role she could take in her future plans. Through her work with the law clinic, Corinne came to some decisions about her plans, which included being "an advocate for detainees" and to "try and represent them." The material in the course enabled her not only to see the issues and problems they faced, but, as a rebel, to consider what position and action she would take to make changes. She explained,

...they [people in general] tend to make the same mistakes over and over, especially like politics implement the same kind of policies over and over after they know that they didn't work before so why would they work now? I think it's really important to get an understanding of what's happened before, how it went wrong, and what I could do after I graduate to improve it.

Corinne is interested in the historical context in which events and problems occurred, in order better to understand how to correct them today. As a rebel, she intimately engages the issues of the community, and, as a rebel who participates in service-learning, Corinne seeks ways in which she can influence and bring about changes using an historical framework.

Kelly, Kristen, and Corinne all exhibit characteristics of rebels as defined by Horowitz (1987). Their attention to their individual experience, their focus on the community and bringing about changes in that community, and their interest in bringing important issues to the forefront of discussion demonstrate that they are modern-day rebels. Furthermore, these students, because

they have participated in service-learning, have an outlet for their activism, courtesy of the university. Historically, rebels challenged the faculty, administration, insiders, and the curriculum, yet they are now able to take a role in effecting change by enrolling in service-learning courses. The university structure was a system to be confronted, but it has also changed and is now bringing the community to the rebels. This shift also influences the way in which rebels develop intellectually; they still strive to answer their own questions, examine their own quandaries, and bring social issues into academia; yet, they also seek approval from their professors at times and believe that a good portion of the work they need to do will occur after graduation, not while they are college students. These changes in the rebels illustrate that they still experience various positions of intellectual development (Perry, 1999) and that their interest in taking action is enhanced because of the support provided by the university, but also that the responsibility for action requires some structure for them to benefit.

### Rebels and Their Intellectual Development

The rebels' attention to and interest in theoretical questions, creative outlets, challenging the establishment, and political debates suggests that a discussion of their intellectual development will relate to the work of Perry (1999). Through the service-learning courses, the rebels in this study, Kelly, Kristen, and Corinne, experienced changes in their perspective and transformations in some of their group's characteristics. Their intellectual development, relating to Perry's theory, is affected by their service-learning experiences, and they evolve into slightly different types of rebels. In this study, the rebels give evidence through their descriptions that they are all in the relativist position, which, according to Perry (1999), is comprised of a variety of components, including a breakdown of the old structure and identity, changed relation to authority, new capacity for detachment, and lack of awareness of a path toward a new identity



through personal commitment. In his discussion of a new capacity for detachment, Perry (1999) asserted, “To observe both an act and its context, one requires an alternate context in which to stand. In offering a plurality of contexts, Relativism provides the ground for detachment and for objectivity” (p. 140). The rebels in this study developed their capacity to be passionate about the work they were doing, but also to step back and observe the work, the research, and various perspectives to assess the credibility of each of these areas.

Kelly described in detail the importance of taking the work and ideas of the class and putting it outward, beyond the classroom, beyond the university, even beyond herself. She sought to bring the ideas and service together, so it could be incorporated in the larger community. She explained,

Like maybe that was the challenge of the class and like doing our projects I was challenged to bring things together in my mind, um, with the impact of all the different things that we had done were on me. Um, so I guess I feel more, more challenged to just integrate all the different aspects of my life and like all the, I don’t want to just like be, go to work, and go to school, and like live in the city. I want it to like come together in some way and have some sort of purpose outside of myself,...

Here, Kelly is provided with multiple contexts that she must synthesize intellectually, as described by Perry with respect to the position of relativism. Kelly’s contexts include her academic life, her personal life, and her service to the community, and she strives to synthesize these contexts so that they have a role beyond her world and that of the university.

Kristen, through both her interviews with nursing home residents about Hurricane Katrina and the public speaking class, was significantly affected in terms of understanding individual experiences, but she also developed a capacity for detachment and a changed relation

to authority (Perry, 1999). From listening to the stories of the nursing home residents and developing her own strengths in assessing material, Kristen began to recognize conflicting information, flaws in news stories, or simply incomplete information presented by the media.

I am more likely to critique various sources of media – both television and newspapers.

Through the interviews, I learned from individuals that information presented on the news was incorrect, and they told me what really happened...

Kristen also described the research that she does when she finds that others are not objectively looking at the information with which they are presented. She said,

My Mom forwards me all these emails about the presidential election and the candidates.

I try to tell her not to trust them because they're just not right. I look up the information they [emails] are saying and then send it to her to show her this is what's really happening.

Kristen has learned to question these sources of information, but also takes it a step further by doing her own research to determine what she believes to be the "real" story. Her ability to maintain objectivity and see authority differently gives evidence that she is in the position of relativism.

Corinne's experience with the law clinic and her service-learning course enabled her to get a broader as well as more discipline-based perspectives on the issue of immigration, and not only to see multiple perspectives, but also to understand each of the ideologies. In response to a question about why immigration became such a political issue, Corinne explained,

I think it would have to do with the job market with um, exporting jobs to Taiwan, to Latin America because they're no longer in Latin America anymore because they put human rights sanctions there so they moved them to Asia, but um, I think economics

plays a huge, huge role. And also the nationalistic sentiment of Americans plays a large role in that too.

Corinne is well versed in the various perspectives on this issue and understood these issues when working with immigrant detainees and the Latin American Consulate's Office. Although she did not pinpoint one perspective as being more valid than others, she understood them in such a sophisticated way and used them to negotiate the settings and individuals that she encountered, in order to complete the work with immigrant detainees.

Rebels developed intellectually and were transformed by the service-learning experiences in interesting ways. While they exhibited typical characteristics of rebels, including maintaining an independent way, searching for knowledge outside of the academy, and circumventing traditional university structures, they also demonstrated qualities that reflect change. Their activist-based sensibilities were maintained, yet the interesting aspect of service-learning was its ability to provide a venue for rebels' activism. By bringing community and social issues to the university, service-learning provided an opportunity for rebels to be a part of the external community *because of* the campus community. Furthermore, interestingly, all of the rebels are in the relativist position, demonstrating components of intellectual development significant in their service-learning experience.

Finally, by taking into consideration two themes—global interpretations of service-learning and the unstructured nature and complexity of problems—these rebels adopted an even broader view of service-learning. For rebels, global interpretations of service-learning not only included community and social issues, but the university, as well. Their focus historically had been outward, seeking answers and ideas outside of the Ivory Tower. Yet, through service-learning, rebels' "global interpretation" came to include the university. The second theme which

is consistent with rebels' perspective is the unstructured nature and reality of problems. While the rebels accept the service-learning structure established for them and other students, they are significantly challenged by the need to resolve issues in the community, but within the academy. These two themes, take in connection with the rebels, demonstrate another perspective in their intellectual development and contribute to the analysis of their growth.

### Conclusion

The three categories of college students—insiders, outsiders, and rebels—have been transformed intellectually through the service-learning experience in a variety of ways. The students interviewed provide some support for Eyler and Giles' (1999) definition of intellectual goals of higher education, which illustrate their learning and development through the experience. Yet, by taking into consideration the intellectual development of each of the groups, one can see that service-learning affects them in new ways intellectually and individually. While they each maintain the basic essence of each of their group's characteristics, the insiders, outsiders, and rebels have evolved into new groups of students because of service-learning, an issue left unconsidered by Eyler and Giles. The new groups—*collegial insiders*, *confident and collaborative outsiders*, and *academic rebels*—will illustrate the changes each group underwent, and are discussed in more detail in Chapter Five. Moreover, with respect to the conceptual framework which incorporates the work of Chickering and Reisser (1993), Perry (1999), and Horowitz (1987), these college students demonstrated changes in their intellectual capacity, gave evidence for particular positions of development, and provided material for developing a richer and more thorough understanding of how students develop intellectually through service-learning.

In addition to the developmental theories, the themes that emerged from the interviews—the questioning of authority or experts, communication skills and audience, knowledge of perspectives and contexts, the unstructured nature and complexity of problems, and global interpretations of service-learning—also contribute to an expanded understanding of the way in which college students experience intellectual development through service-learning. It is through these themes and the new categories of college students that intellectual development can be explored and understood differently in relation to service-learning. This understanding takes into consideration important foundations including the research of Eyler and Giles (1999) and the developmental theories of Perry (1999) and Chickering and Reisser (1993); however, this study shifts the way intellectual development is typically recognized by incorporating characteristics of groups of college students that have been a part of campus life since the 18<sup>th</sup> century. While each of the groups evolved over the intervening two centuries, they have changed once again in the context of service-learning, which is now a significant component of higher education and of the curriculum. These transformed categories of students and the themes that emerged from the interviews have provided a new way of understanding college students' and their intellectual growth through the service-learning experience.

In Chapter Five, I will reexamine these issues, in order to address the research question and subquestions posed above and to explore the impact on policy and practice and future research of service-learning, college students' intellectual development, and the three groups of college students—insiders, outsiders, and rebels.

## **CHAPTER V**

### **DISCUSSION**

This study has examined college students' intellectual development through their service-learning experience. It also studied the relationship between college students' individual characteristics and their service-learning experience in order better to understand their intellectual development. In interviews of twelve upper-division college students who completed a service-learning course, students demonstrated ways in which their identity and intellect developed. This development was exhibited through themes which emerged in the interviews, including the questioning of authority or experts, communication skills and recognizing various audiences, knowledge of perspectives and contexts, the unstructured nature and complexity of problems, and global interpretations of service-learning. Finally, this study has illustrated the importance of further examining established research conducted on college students' learning and intellectual development in relation to service-learning and, more specifically, to Horowitz's (1987) groups of college students.

#### Overview of Study

While there is some research on college students' learning, cognitive development, and intellectual development in relation to the service-learning experience (Bringle & Hatcher, 1996; Eyler, 2000, 2002; Eyler & Giles, 1999, 2002; Kendrick, 1996; Markus, Howard & King, 1993; Steinke & Buresh, 2002), much of the research focuses on college students' personal or individual development (Kuh, 1995; Rhoads, 1997, 1998), their changing attitudes and multicultural perspectives (Billig & Furco, 2002), or their degree of civic engagement (Battistoni, 1997; Rhoads, 1997, 1998). More recently, researchers have begun to shift their focus to examining students as citizens of the world or agents of social change through their

involvement with service-learning (Cunningham & Kingma-Kiefhofer, 2004; Lewis, 2004).

While these areas of study are relevant to understanding service-learning's role, such research does not attend to the importance and nuances of students' intellectual development, their individual characteristics in relation to intellectual development, and those characteristics in relation to the service-learning experience. Examining the details of these questions is necessary in order to establish and maintain service-learning's credibility, durability, and potential value in the university setting (Zlotkowski, 1995). However, investigating the relationship between intellectual development and service-learning is not adequate for understanding the depth of the experience of college students who participate.

To explore these questions further, twelve upper-division students from two universities were interviewed about their service-learning experience and perceptions of their intellectual development. Based on their experiences, interests, and priorities as college students, they demonstrated certain group characteristics, thereby providing an opportunity for a more nuanced analysis of their intellectual development in the context of the service-learning experience. This study sought to understand the way in which these students developed intellectually and how these groups of students transformed intellectually through the service-learning experience. The conceptual framework established a foundation based on the theories of Perry (1999), Chickering and Reisser (1993), and Horowitz (1987) in order to investigate how college students in three distinctive groups transformed intellectually. The framework also took into consideration the intellectual goals of higher education, as defined by Eyler and Giles (1999), to determine the relationship between these intellectual goals and students' perceptions of their intellectual development. The conceptual framework and the research questions and subquestions guided this study to examine issues surrounding college students' service-learning experience and their

intellectual development. The following questions framed the study and enabled it to contribute to an important exploration of college students.

The primary research question for this study was:

- How do college students develop intellectually through service-learning?

The subquestions for this study were:

- How does service-learning enhance college students' understanding of their intellectual development?
- How do college students articulate their understanding of intellectual development?
- How do college students perceive themselves as having developed intellectually, including application of material, development of critical thinking and problem solving, and changes in their perspective?
- How have college students across Horowitz's categories been transformed intellectually through their service-learning experiences?

Interviews with twelve upper-division college students who had completed a service-learning course generated defined themes, including 1) the questioning of authority or experts, 2) communication skills and audience, 3) knowledge of perspectives and contexts, 4) the unstructured nature and complexity of problems, and 5) global interpretations of service-learning. Multiple students described these themes in relation to their service-learning experience or their intellectual development; these themes in turn provide information that departs from existing literature on service-learning and college students' learning. In addition, when considering Horowitz's (1987) three groups of college students in relation to the service-learning experience and students' intellectual development, this study showed the importance of,



and provided for a new and richer understanding of, the way in which college students are transformed in distinctive ways by the experience.

#### Relationship Between Themes and Transformation of College Students

Through the service-learning experience, college students were transformed intellectually. More specifically, these changes were linked with the identification with their respective groups (Horowitz, 1987). These groups—insiders, outsiders, and rebels—were transformed by service-learning in ways that are consistent with each group’s characteristics. For instance, generally, insiders tend to prioritize the peer and social components of college life, and when these insiders changed through service-learning, they developed a peer-like relationship with faculty. Also, outsiders focus on their academic experience and identify strongly with faculty. When outsiders participated in a service-learning course, they continued to prioritize their intellectual experience, but with both peers and faculty. Finally, rebels are independent thinkers who explore ways to both challenge and look beyond the academy for intellectual engagement. The rebels interviewed in this study also focused on their independence of spirit and engagement; they challenged the faculty and administration to bring service-learning’s focus to the community and to incorporate larger social issues.

In addition to the transformation of Horowitz’s (1987) three groups of college students, their experiences through service-learning parallel specific themes which emerged from the interviews and were described in Chapter Four. The analysis of the interviews and close study of the themes suggests the need to examine each of the three groups of college students with respect to particular, yet complementary themes to enhance the understanding of the themes and these groups’ transformation. First, insiders’ communication skills and their perception of audience shifted as they began to see their professors as peers through the service-learning experience.

Second, outsiders' experience was consistent with the theme of knowledge of perspectives and contexts, and they took this theme a step further by including peers, instead of only faculty, as sources of perspective and interpretation as they pursued questions posed in the academic arena. Outsiders' transformation also paralleled the theme of the questioning of authority or experts as they explored other resources of knowledge beyond their professors. Third, rebels' attention was on the global interpretations service-learning; yet, while they traditionally had looked outside of the academy for advanced understanding, it is through service-learning that rebels expanded their view to include the university. In addition, rebels also faced the unstructured nature and reality of problems because these are often the larger issues in society, a challenge appealing to this group.

### Analysis of Themes

The themes generated from the interviews provide a foundation from which to work and to develop an understanding of the ways in which these groups transformed intellectually. They include: 1) the questioning of authority or experts, 2) communication skills and audience, 3) knowledge of perspectives and contexts, 4) the unstructured nature and complexity of problems, and 5) global interpretations of service-learning. Each of these themes provides evidence for aspects of the impact of service-learning on college students' intellectual development and their ability to articulate that development. More specifically, the first three themes directly address interpersonal capacities and complexities in the service-learning experience and the last two address the complexity and challenges of ill-structured problems related to service-learning. Accordingly, these themes will be discussed later in relation to college students' intellectual development and transformation.

### *Interpersonal Capacities and Complexities*

The first three themes—the questioning of authority or experts, communication skills and audience, and knowledge of perspectives and contexts—all involve individuals who take part in the service-learning process, including faculty, researchers, students, community members, and community organizations. The focus of these individuals in relation to the service-learning experience relates to their interpersonal capacities and the complex nature of both individual and group dynamics. In the description and analysis of the first theme—the questioning of authority or experts—students demonstrated that they began to rethink previously taught beliefs and previously held ideas. They also examined and scrutinized material presented to them by other researchers and data that they had gathered themselves more critically than they had prior to the service-learning experience. The students' abilities to assess and critique information represented a new development and became apparent to them as they described the relationship of this kind of inquiry to their service-learning experience.

This theme, the questioning of authority or experts, demonstrates the value and recognition of the broader definition of intellectual engagement and expands on the research on academic achievement in particular service-learning courses (Checkoway, 2001; Kendrick, 1996; Kezar & Rhoads, 2001; Markus, Howard, & King, 1993). While important in determining an aspect of the impact of service-learning college students' intellectual development, academic achievement also provides a specific understanding of intellectual growth in the service-learning context. This research adds to the understanding of the way in which service-learning courses affect students' grades and understanding of the course content. Yet, themes such as the questioning of authority or experts contribute to the understanding of the impact of service-learning on those students, but also on those students after they graduate. These students, having

been provided with an opportunity to test their skills and question authority, experts, research, or data, are able to use those skills in a number of settings, both in college and outside of the academic arena, after they leave.

The second theme—communication skills and audience—illustrated college students’ abilities to enhance their communication skills, and, more importantly, to adapt to different audiences and to bring about certain responses or information from others. Through the service-learning experience, students’ awareness of communicating with various groups with a variety of interests and objectives was enhanced; this awareness in turn enabled them to test different methods depending on the audience in order to determine which strategy would work most effectively. The third theme—knowledge of perspectives and contexts—not only takes into consideration the perspectives of others, but, more importantly, addresses the context from which individuals developed those perspectives. The “others” in this theme include students in the service-learning courses and individuals in the community, and the students interviewed recognized the nuances and complexity of other contexts.

These areas described by students were particularly complex, relating to class, race and ethnicity, socioeconomic status, and the religion of the students interviewed, the students in the course, and the members of the community. The students who expressed these ideas have provided a possible explanation for Kendrick’s (1996) term “quality of thought” in his article on the comparison between sociology courses which have a service-learning component and those which do not. While Kendrick found that students enrolled in the service-learning sociology course had improved in terms of social responsibility, personal efficacy, and application of course content, he also concluded by expressing that “service-learning promotes quality of thought” (p. 79). While somewhat general, this phrase characterizes the theme, the knowledge of

perspectives and contexts. Based on the interviews, the students enhanced their quality of thought through their service-learning experience when they spoke about the complex issues raised and when they recognized the value of considering, not only another's perspective, but also the framework from which one writes or speaks. Students' "quality of thought," in this setting, entails their ability to recognize the role of individuals' backgrounds, experiences, and the lens through which they consider their ideas, points, or arguments.

### *Complexity and Challenges of Ill-Structured Problems*

The other two themes—the unstructured nature and complexity of problems and global interpretations of service-learning—represent a complex perspective on the challenges of addressing ill-structured problems encountered through the service-learning experience. The theme—the unstructured nature and complexity of problems—reflects the realization of issues and problems in the community and the complexity in developing appropriate responses or reasonable solutions. King and Kitchener (1994), in their research on reflective judgment, discussed the ideas of ill-structured problems and the importance of considering them in their assessment of critical thinking. They describe ill-structured problems as problems which “involve doubt about the adequacy of one's current understanding of the issue” (p. 79). They also stated that “this analysis has also pointed out that many measures of critical thinking actually measure reasoning about well-structured rather than ill-structured problems...” (p. 97). The theme, which emerged from the interviews in this study, unstructured nature and complexity of problems, reflects the essence of King and Kitchener's notion of ill-structured problems, because both terms address the complexity and nuanced nature of community and societal problems.

Like King and Kitchener, I also acknowledge the challenges that students face, not only because the problems are difficult to resolve, but also because these experiences require the student to recognize and even challenge what he or she does and does not know. However, in their definition of ill-structured problems, King and Kitchener (1994) do not include the notions addressed by students in this study, such as: 1) the cyclical nature of problems leading to solutions leading to more problems and 2) the way in which unanswered questions bring about action in students. While the definition and the theme parallel one another and acknowledge the value of complex problems when examining college students' intellectual development, there are aspects not examined in King and Kitchener's definition which could be explored further.

The theme in this study—the unstructured nature and complexity of problems—portrays the large scope of service-learning not immediately recognized within the university or by college students. Yet, service-learning provides that exposure to the “real-life” issues, and more importantly, addresses both the questions posed and the challenges faced in formulating solutions. The college students interviewed began to develop a broader understanding of social issues, took into consideration the complexity and cyclical nature of problem solving, and were encouraged by the experience to take additional action, beyond service-learning and the college environment, to resolve the problems and examine potential solutions.

With respect to the final theme—global interpretations of service-learning—students developed an understanding of how service-learning could affect many aspects beyond the individual and relate to larger, more global issues, as well as to how service-learning could be interpreted in a variety of ways. To many of the students interviewed, service-learning took on different meanings from how it is traditionally perceived. One of the students associated service-learning with recognizing the creativity within herself as well as knowledge that she wanted to

share. Another discovered how the lessons of service-learning in engaging and seeking to understand others could be transferred to his personal life with family and friends. One student applied the knowledge that she acquired through service-learning to the philosophy and pedagogical methods of her future teaching career. While the theme of global interpretations of service-learning refers to the broad aspects of service-learning, applicable to the larger questions and challenges of society, in this context, it also explains the variety and complexity of understandings students acquired through the service-learning experience. Examining the themes in two groups or frameworks relates to both the internal and external components of service-learning and college students' perceptions of their intellectual development.

#### New Model of College Students

The five themes emerged from all of the interviews, and yet, upon further reflection, the themes are also consistent with each of the groups of college students, reflecting the understanding of service-learning's distinctive effects on their intellectual development and transformation. The theme of communication skills and audience relates particularly clearly to the priorities of the insiders and their experience with service-learning. The themes of the questioning of authority or experts and knowledge of perspectives and contexts are consistent with the outsiders' intellectual development through the service-learning experience. Finally, the themes of the unstructured nature and complexity of problems and global interpretations of service-learning coincide with the intellectual development of rebels as they participate in and are affected by service-learning. With this new understanding of the relationship between particular themes and Horowitz's (1987) groups of college students, these groups of college students—insiders, outsiders, and rebels—are transformed and new categories were developed,

reflecting a more modern understanding of the groups and the way in which they were influenced by the service-learning experience. (see Figure 2)

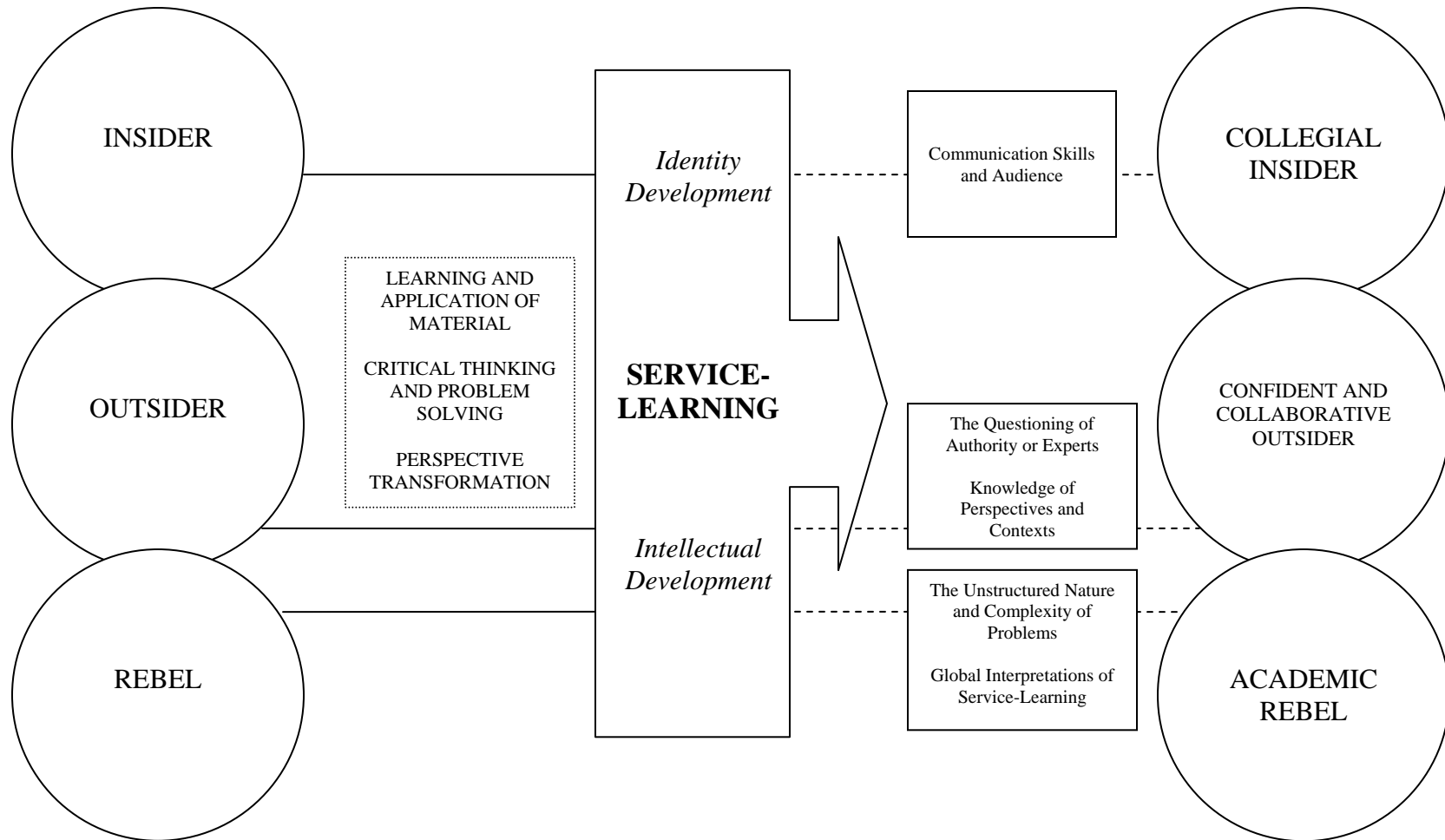
The theme of communication skills and audience is consistent with the priorities of insiders in the following ways: insiders, given their interest and focus on their peers, leadership opportunities, and the social experience of college, need to understand and expand upon their communication skills as well as their understanding of their audience. Moreover, through the service-learning experience, insiders' traditional "peer" relationship expanded to include faculty, given the working relationships that many of them developed with their professors. The service-learning experience enabled insiders to open up to different groups and create a more inclusive peer group, one that allowed them to have a better understanding of the way in which they communicate and the way in which they relate to various audiences.

To be authentic insiders, even as they transformed to incorporate faculty into their circle, these students demonstrated that they found a way to negotiate the student-faculty relationship that works for them. It also provides faculty with an opportunity to mentor and guide students in a different way. Historically strongly connected to traditional peers but antagonistic towards faculty and administration, insiders were transformed by service-learning and recognized their professors as valuable resources, but applied their "peer" framework to them to establish a relationship that is consistent with their principles. Because of the transformation that insiders undergo through the service-learning experience, the name that I use to identify them after their transformation is *collegial insiders*. Collegial insiders maintain their focus on the peer experience and, through service-learning, include others, such as faculty, who guide them through the service-learning course. Collegial insiders are more open to communicating with



# NEW MODEL OF SERVICE-LEARNING AND COLLEGE STUDENTS

## FIGURE 2



Adapted from: Eyler and Giles, *Where's the Learning in Service-Learning?* (1999)  
 Chickering and Reisser, *Education and Identity* (1993)  
 Horowitz, H.L. *Campus Life* (1987)  
 Perry, W.G. *Forms of Ethical and Intellectual Development in the College Years* (1999)

and considering audiences that they previously ignored, and service-learning provided the opportunity for them to expand their perspective to convey their values and interests to others, including faculty. Furthermore, they took time through the service-learning course to understand their audience and to negotiate the relationship in this new, more collegial way.

Outsiders, as students who focus on faculty and prioritize the academic experience in college, are also transformed intellectually through the service-learning experience in ways that involve the themes of the questioning of authority or experts and knowledge of perspectives and contexts. Outsiders, historically students who would not challenge authority, in the service-learning setting, developed the skills to question what they have been taught and what is being presented to them in class and in the material. This experience and the way in which outsiders transformed supports Exley's (2004) description of the value of cognitive engagement with service-learning as opposed to civic engagement. Exley asserted the importance of the educational experience, knowledge of course content, and the academic environment's challenging of established belief systems. Given outsiders' development of questioning authority in the service-learning course, their experience reflects the intellectual development described by Exley. Outsiders began to seek additional information, which is consistent with their identity, and yet, they became more wary and critical of the information presented to them as "knowledge" or "truth." In addition, outsiders developed an understanding of others besides faculty, and took into consideration the views of student peers as well as community members, thereby providing evidence of their new knowledge of the perspectives and contexts of others. Recognizing individuals besides faculty as valuable sources of information demonstrated their transformation and enabled them to interact with a variety of groups in an intellectually engaged

context, a fact which subsequently enabled them to become more comfortable and confident in a variety of settings.

With these experiences of questioning authority and understanding others, post-service-learning outsiders are renamed *collaborative and confident outsiders*. Through the service-learning experience, outsiders acquired the ability to take into consideration and work with a variety of individuals, including faculty, students, and community members. Historically, outsiders tended to identify intellectually only with faculty, and they rarely engaged with other students or with those outside of the academy. With the service-learning experience, collaborative and confident outsiders recognized the value of including peers and community members in their quest for knowledge, in addition to seeking that knowledge from faculty. Furthermore, with myriad collaborations, they began to recognize their strengths, the contributions that they can make, and therefore, became more interested in conveying their thoughts and ideas to a variety of groups.

The two themes that are most consistent with the values and interests of rebels are the unstructured nature and complexity of problems and global interpretations of service-learning. Interestingly, these themes reflect a broad interpretation of service-learning and, given rebels' interest in the experience for themselves and beyond the Ivory Tower, they are consistent with rebels' priorities. Through the service-learning experience, rebels began to consider the academy more seriously as part of their college experience, yet still challenged it and its values. The theme of the unstructured nature and complexity of problems connects with the ideology of the rebels because it addresses the questions that relate to the larger issues in society—such as immigration and urban (re)development—issues that are challenging to resolve and yet ones that rebels seek to address. The other theme, global interpretations of service-learning, also

correlates with the broad base from which rebels often work, and yet these “interpretations” for rebels include the academy. Historically, rebels took part in the community in spite of the university. By contrast, service-learning now provides an opportunity for rebels to be a part of the community and society in an organized and structured way. The rebels take part in this new structure, even though it is university-organized, which has enabled them to have a better and more open understanding of the role of the university in the changes they seek to effect.

Rebels’ willingness to participate actively in service-learning illustrates that they are willing to tolerate the university structure, provided that it be consistent with their values. Moreover, the engagement that occurs with faculty and other students at times reveals the need to adjust the name of the category to *academic rebels*. Academic rebels are interested in focusing on societal issues outside of the university, and yet employ the university structure to facilitate their goals. Given their value system, rebels are likely to continue to challenge the way in which the faculty member or service-learning department handles the service-learning experience, whether because of the choice of community organization, the type of service work in which they participate, or the academic requirements for the course. However, academic rebels have an outlet for activism, courtesy of the university, so they have found ways to resolve the contradictions that they might face between their identity as activists and their roles as college students.

Bickford and Reynolds (2002), in their research on activism and service-learning, argue that activist efforts and frameworks effect broad social change rather than focus on individual ways that allow college students to help the community. They explain, however, that the organizational structure of higher education limits the activist notion of service-learning in addition to the actual term “activism”; they therefore prefer to emphasize the often-

interchangeable variations of service, service-learning, and volunteerism, to name a few. The academic rebels in this study would likely identify with the “activist” framework and even be willing to use the term. In addition, based on the rebels’ responses about their service-learning experience, while they at times they demonstrated disdain or simply did not participate in the extra/co-curricular structure of the university, they did engage in the service-learning course in a significant way and were changed by the experience. They identified with their role as an activist and carried it out through a variety of ways, including the service-learning structure, established by the university for students.

These new categories of college students—*collegial insiders*, *collaborative and confident outsiders*, and *academic rebels*—demonstrate a profound intellectual transformation through the service-learning experience. The students evolved into new groups, which are reflective of the current college students who have participated in service-learning. In addition, they illustrated a nuanced and specific representation of these groups. Though these categories are grounded in an invaluable historical framework developed by Horowitz (1987), the new categories will provide faculty, service-learning departments, and university administrators with a more modern and complex understanding of the categories of college students and the way in which they are transformed through the service-learning experience.

### Conclusions and Research Questions

This reformulation of how college students are transformed intellectually through service-learning makes a number of important contributions to the research question and subquestions for this study and to scholarly understandings of service-learning, intellectual development, and higher education. This section addresses the research questions and

subquestions and provides responses to the issues, the better to understand service-learning and the intellectual development of college students.

### How do college students develop intellectually through service-learning?

College students develop intellectually through service-learning in ways that are unique to their experience in these combined academic and service-based settings, illustrating the role of service-learning in relation to students' intellectual growth. College students demonstrated their intellectual development by reframing their own thinking and examining new information in a clear and nuanced way, taking into consideration the sources, narratives, and the contexts, as they assess new information's relevance, quality, and value. They also displayed the ability to negotiate various settings well because of a heightened awareness and understanding of audience. Moreover, service-learning provided them with the structure and support with which to recognize that intellectual development is a process of growth and discovery that they experience in a variety of environments and in a number of ways. Their intellectual development is experienced through their professors and peers, the work in the community, as well as activist-oriented service work. Their experience of these processes is also in part shaped by their membership with particular groups of students, each with recognizable traits.

Based on the service-learning experiences of these students, I conclude that intellectual development is paradoxical. It is both a way to be organized and a way to be creative. It is both a way to listen and a way to take action. It is a relationship with a peer and one with a mentor. It is both breaking down preconceived notions and values to reframe them and building them in a new way. Finally, it involves the recognition that they are intellectual beings who possess an identity that is transformative, challenging, open, interpretive, and active.

### How does service-learning enhance college students' understanding of their intellectual development?

Service-learning enhances college students' intellectual development in a variety of ways. First and foremost, the service-learning experience, from the work of college students with members of the community, to the questions posed in the classroom setting, to the processing of the service experience and the course material, drives students to develop new perspectives and broadens their understanding of their educational experience. At times, these perspectives do not correlate with, and may even contradict, the information that college students already have. The service-learning experience exposes students to new ideas, which they may agree with, adapt to, adjust to, or reject, depending upon their pre-existing intellectual skills and those acquired through the experience.

As Eyler and Giles (1999) also suggest, I found that, in the settings in which the service was well integrated with the course expectations and material, many college students became astute observers of information transferred from one setting to another. These observations changed how students accepted information and led many of them to be critical and skeptical, at least until they obtained all the information and a range of perspectives that enabled them to make effective judgments about the material. Finally, the conclusions that college students drew based on the service-learning experience, made them durably more receptive to critical engagement with the educational setting, enabling them to formulate additional inquiries in order to explore other solutions. In this way, they demonstrated the cyclical nature of problem solving. From these progressions through the service-learning experience, college students developed intellectually by enhancing their observational skills, their ability to assess and critique information, and their capacity to incorporate, adapt, or reject new information into their current

perspective. In the end, they were able to determine when to accept concepts as valid and when to seek additional perspectives and information.

#### How do college students articulate their understanding of intellectual development?

College students articulated their understanding of their intellectual development in a number of ways, demonstrating unique perspectives on their service-learning experience and the ways in which it related to their intellectual growth. Students expressed aspects of their intellectual development in relation to their ability to think differently, and to do so in a more in-depth and introspective way. They also recognized and discussed their ability to adapt to and negotiate various environments. Their altering of their communication style also provided a clear example of their transformed articulation of their intellectual development and recognition of and active engagement with those changes in themselves.

In addition, students perceived intellectual development as growth that included a creative element, which extended well beyond academics, in contradistinction to prevailing understandings of intellect, usually involving such components as critical thinking, problem solving, or analytical thinking. These students thought about intellectual development in new ways and formed their own ideas of what it was and what it meant based upon their experience with service-learning. They experienced the process of taking in new ideas, as described in the previous section, and determined how those new ideas fit into their current understandings or how, instead, they needed to adjust their current understandings to allow room for new notions. Thinking and talking about intellectual development in these ways provided a creative outlet and allowed them to experience this development outside of the university and demonstrated a significant openness to reframing old ways of thinking. Finally, this reframing increased



students' awareness of their intellectual identity, now bound up in a new conceptual universe and a new way of thinking about themselves.

How do college students perceive themselves as having developed intellectually, including application of material, development of critical thinking and problem solving, and changes in their perspective?

By using Eyler and Giles' (1999) definition of the intellectual goals of higher education, I showed that college students in this study described examples of each of the categories included in that definition—learning and application of material, critical thinking and problem solving, and perspective transformation. This definition was used in order to determine how students developed intellectually and to account for instances in which their experiences did not correlate with these categories and a closer examination of their experiences and development of new explanations of intellectual growth were therefore required. Many of the students provided evidence and discussed aspects of each of the categories, including their ability to make significant connections between the service and the course material, the experience of having their ideas challenged by others, and sometimes being forced to reframe their thinking and perspectives. This reframing ultimately affected some students' views of themselves, their value systems, and their belief systems, leading to fundamental changes in their worldview, as described by Eyler and Giles' definition of perspective transformation. Nonetheless, not all of the students provided examples of all of the categories, and their individual, unique experiences were examined rigorously in order better to understand their intellectual development in relation to the service-learning experience. From detailed analysis of the interviews, the five themes that emerged—the questioning of authority or experts, communication skills and audience, knowledge of perspectives and contexts, the unstructured nature and complexity of problems,

and global interpretations of service-learning—demonstrate different facets of how students developed intellectually through the service-learning experience.

How have college students across Horowitz's categories been transformed intellectually through their service-learning experiences?

To understand the themes in a more specific way, I analyzed them in relation to the group characteristics of college students, as defined by Horowitz (1987), in order to illustrate how these students were transformed by the service-learning experience. Analyzing the three groups of students—insiders, outsiders, and rebels—required further analysis in relation to the themes, so as to enable a better understanding of their transformation and intellectual growth. First, studying the insiders through the lens of the theme *communication skills and audience* allowed for a more complete understanding, because it highlights their willingness to be more open to various individuals and groups, which in turn enhanced their ability to communicate. This new understanding requires a new name for their group, which I dub the *collegial insiders*. Second, the outsiders' service-learning experiences and intellectual development are more clearly understood when analyzed in the context of two of the themes in particular, *the questioning of authority or experts* and *knowledge of perspectives and contexts*. They develop into a new group, whose identity more clearly reflects their willingness to challenge authority figures (under the right circumstances) and to develop an enhanced understanding of others' perspectives and the contexts of those perspectives. They became *confident and collaborative outsiders*. Third and finally, the rebels' experience is demonstrated in relation to two particular themes, *the unstructured nature and complexity of problems* and *global interpretations of service-learning*, given their inclination to grapple with complicated issues and the broad perspective that they bring to the experience, in the context of the university setting. This new interpretive pattern is captured in the term *academic rebels*. These groups, originally defined in the late 1980s by

Horowitz, provide a valuable historic and progressive interpretation of college students. The foundation that Horowitz established, coupled with the themes which emerged from this study, in turn allowed for a new conceptual typology that highlighted and reflected college students' intellectual development through the service-learning experience.<sup>3</sup>

### Implications for Policy and Practice

Because service-learning has become increasingly integrated into the curriculum, it is necessary to re-examine institutional policies and practices, so that students, faculty, and staff are protected, have a positive and intellectually engaging academic experience, and establish and maintain a mutually beneficial relationship with community organizations and members of the community. Service-learning policy makers and those who implement those policies should also consider the students' experiences with service-learning, as well as the ways in which their individual characteristics affect their intellectual development. Finally, these policies and practices should consider the roles of faculty, staff, as well as the community organizations and members of the community, in order to inform and educate students in ways that shape their intellectual and personal development.

When establishing policies for service-learning within the university, various departments, individuals, and programs should be recognized in the effort to effect a positive and intellectually engaging service-learning experience. Given this research on the varying ways that different groups of students are affected intellectually by service-learning, policy makers should consider these differences and the importance of offering a variety of service-learning courses in which students can enroll, at levels from first to senior year. Different groups of students

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<sup>3</sup> In addition to examining the relationship between the characteristics and the general themes, one could explore the interrelationship among Horowitz's (1987) group characteristics through the service-learning experience. For example, as outsiders take into consideration peers' perspectives, one could argue that they begin to demonstrate some characteristics of insiders. Also, insiders who have taken on characteristics of outsiders and rebels who have taken on traits of rebels, mainly through their service-learning experience, could be studied further.

throughout their academic career are likely to respond differently to different course offerings. As a means to provide those shared intellectual experiences for students with varying interests, service-learning policy makers must encourage various academic departments to offer a variety of service-learning courses. Furthermore, policy makers who look to the mission of the university are provided with an important foundation from which to implement effective service-learning programs that engage individual groups of students intellectually. While virtually all mission statements include learning as a component, as well as service of some kind, policy makers need to examine the mission statement further to explore references to forms of development, including individual, social, or intellectual forms. This type of reference will demonstrate the values and priorities of the institution and service-learning can then be developed accordingly. They should also examine their mission statement for a specification of the type of student that the university strives to develop and to explore further connections with service-learning. From here, university administrators and service-learning departments can establish policies which carry out the mission of the university, fulfill the expectations of the service-learning program, and satisfy the varying interests of college students who participate in it.

Given the growing interest in intellectual engagement of students through service-learning, faculty members should also play an instrumental role in developing and implementing service-learning courses and curricula. As a means to encourage involvement, university administrators and policy makers should establish service-learning as an institutional priority of the university and promote continuous education and training of new and current faculty. Establishing a policy whereby faculty are educated about service-learning, college student development, and ways in which service-learning can be incorporated in their classes, will

establish service-learning as a priority and provide faculty with the information and support needed to implement service-learning in their courses. Moreover, when one creates policy related to service-learning, a variety of students who have participated in service-learning should be included in the discussion. Doing so will bring another valuable perspective into the discussion and facilitate consideration of varying viewpoints. These policies—ensuring the variety of courses, taking the university mission into consideration, educating faculty, and including service-learning students in the discussion—will allow for opportunities for different types of students to have an intellectually and personally engaging service-learning experience.

With respect to implementing service-learning and taking into consideration the findings from this study, service-learning departments and academic departments can learn strategies and pedagogical methods to offer valuable and intellectually challenging opportunities for different types of students. One way to do so is related to the policy of educating faculty about service-learning. Service-learning departments, deans, and chairs should collaborate and provide a variety of training sessions to new and experienced faculty, so that they can have the most current and specific information about service-learning and implementing it in their courses. These kinds of sessions can also include information about college students' intellectual development, theories associated with that development, and various models of college students and their priorities. Sharing this information will prepare faculty and their departments to offer worthwhile service-learning courses that engage a variety of students intellectually.

With the support of these sessions, faculty can in turn develop courses that not only include service-learning in a significant way, but also take into consideration the three groups of college students—insiders, outsiders, and rebels. They can develop courses in which various groups of students can respond and become engaged intellectually. For instance, with insiders,

faculty should be prepared for how they may be viewed by students in the beginning of the semester (with skepticism) and how that perception may change during the semester through service-learning (peer-like). Also, insiders will likely benefit from being given responsibilities associated with service-learning, since their priority is based on identity and leadership development. With outsiders, by contrast, it will be important for faculty to act as support to them and offer opportunities for both individual projects and group projects, thereby maximizing outsiders' strengths through individual work but challenging them to try a different learning method through group efforts. With rebels, it would be particularly important for them to provide input and have a voice regarding the service component of the courses. One opportunity for students, especially rebels, to provide feedback, comes after they register for the course, but before the semester begins. Rebels would truly benefit from this option because it would enable them to contribute to the discussion about service and shape their role and participation in the service-learning course.

Research-driven policies and practices provide university administrators, faculty, and staff with valuable opportunities to take the information acquired from study and analysis and use it in effective and focused ways. The development of policies and their implementation, based upon thorough and ethical research, will be beneficial to students, the campus community, and the campus culture. This kind of practice demonstrates that the university prioritizes research, not only for faculty, but also for the education, engagement, and experience of the current and future students at the institution.

#### Future Research

After exploring the questions associated with service-learning, college students' intellectual development, and the way in which students were transformed through the

experience, I raised other questions requiring further study in this area and other areas. Many aspects of this research remain unexamined, and additional research would provide other researchers, policy makers, and practitioners with valuable information about service-learning, college students' intellectual development, and categories of student groups. In addition, having an understanding and knowledge of these areas will foster additional discussion and analysis and facilitate an expanded perspective on new areas of research.

While this study examined the experience of upper-division students (third- and fourth-year students), it would also be beneficial to investigate the service-learning experience and intellectual development of first- and second-year students. Given the interest in and importance of student retention (Pascarella & Terenzini, 2005; Tinto, 1994), studying the impact of service-learning on these students would be of value to the admission and retention process at colleges and universities. Potential college students are making decisions about which college to attend based on the service-learning priorities of the institution, thereby demonstrating the importance of researching the impact of service-learning on first-year students. In addition, first- and second-year college students are particularly influenced by the college experience and their transition into the academy; therefore, their experience in service-learning during the first two years is of particular importance to their college career.

Other students that one should consider focusing on in relation to their service-learning experience include African-American college students, female college students, or male college students. While one of the sites for this study is a historically Black college, attention is placed on students' perceptions of their intellectual development and the characteristics that they possess based on the three categories. Interviewing only African-American college students about their service-learning experience could provide different insights into their experience with

service, its incorporation in the curriculum, and any connection to their identity as college students. Also, because service-learning tends to elicit higher participation among women than among men, it would be beneficial to investigate and explore the reasons why female students and male students choose to participate in service-learning.

Another group to study with respect to the relationship between service-learning and college students' intellectual development includes graduates of colleges and universities who participated in service-learning. Graduates who are three to five years out of college would provide a different perspective on their service-learning experience and would have other experiences, whether academic or professional. This would allow for an explanation of the impact of service-learning on at least two areas: 1) their continued intellectual development and 2) service-learning's influence on their decisions after college. Given their greater distance from the service-learning experience, graduates would allow for a different kind of analysis of service-learning and their intellectual development, one that is potentially more nuanced and complex because of their experiences beyond the undergraduate experience.

Many of the faculty discussed by students played a significant role in the service-learning experience and students' perceptions of their intellectual development. A number of faculty affected students' development and their transformation, especially with respect to two themes—the questioning of authority or experts and the unstructured nature and complexity of problems—and of the experience of insiders, outsiders, and rebels. Because of faculty's impact on students' experience, it would also be interesting to examine the perspective and pedagogical methods of faculty in service-learning courses. It would be valuable to interview faculty who teach these courses in order to obtain their perspective on the intellectual development of college students. Their experience as professors who see students regularly during the semester would enable



them to recognize changes that occur in students over that time. Therefore, faculty could contribute to the research on service-learning and college students' intellectual development by adding to the understanding of students' transformation during the semester.

Another important area of the university to consider involves service-learning departments. These organizers and facilitators of service-learning have important impacts on students' experiences, faculty members' ability to incorporate service in their courses, community members' participation and trust of the college community, and administrators' understanding of the execution of the process. Because of the significant role that these departments play and their prevalence on college campuses, it would be informative to study the evolution of service-learning departments even over the past five to ten years. More specifically, one could examine the missions, goals, and practices of these departments and consider their role in the intellectual development of college students to better understand their influence in this type of transformation.

In addition to the research that could be conducted on service-learning and college students' intellectual development, one should examine the roles of the three groups of college students—insiders, outsiders, and rebels—in other collegiate contexts, including areas such as study abroad. According to the *Chronicle of Higher Education*, the number of undergraduate students participating in study-abroad programs has increased nearly 150% over the past 10 years (Fischer, 2008). As a result, it would be of interest to examine these students' experiences in that context and how each of the groups may change through the study-abroad experience.

Each of these areas of study would contribute to research on service-learning, college students' intellectual development, and the historical categories of college students, providing valuable insights to the field of higher education. From investigating college students and

graduates to faculty and service-learning departments, further research would be valuable to current and future college students. In addition, conducting research in these areas would enable researchers, policy makers, and practitioners to make educated decisions benefiting students, faculty, administrators, as well as the field of higher education as a whole.

### Final Remarks

A number of new ideas were presented in this study, as well as information supported by previous literature on service-learning and college students' intellectual development. Based on the five themes, which emerged from the interviews, and the analysis of the categories of college students, three original categories of college students were developed to provide a different and modern interpretation of their transformation through the service-learning experience. These new groups reflect the possibilities for a more thorough, and complex understanding of current college students' service-learning experience and their intellectual development.

By examining college students' intellectual development in relation to their service-learning experience in this unique way, this study adds to the discussion and research on service-learning and provides a new approach to the analysis of these kinds of student experiences. Given the prevalence of service-learning in the university curriculum today, it will be necessary to continue to explore its impact on college student development, the academic experience, and higher education in general. Research will enable a better understanding of service-learning in relation to the college student experience. Through research-driven practice, college students will have a meaningful, intellectually challenging, and academically enriching service-learning experience.

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## **APPENDICES**

**Appendix A**  
**Email to Service-Learning Directors**

Professor/Dr. \_\_\_\_\_,

I am doctoral student in Higher Education Administration at the University of New Orleans, and I am currently conducting research for my dissertation. The focus of my research is undergraduate students' (juniors and seniors preferably) service-learning experience and its relationship to their intellectual development. It is a qualitative study; therefore, I am planning to interview students who have taken a course that included a service-learning component.

After consulting with \_\_\_\_\_, I was interested in speaking with you about the Office of Service-Learning and the students who have participated in course related service-learning programs. I would be interested in speaking with some of the students who have gone through your department to see if they are interested in participating in this project.

I would like to set up a meeting to discuss your department's mission, my research, and the way in which your institution may benefit from the information I acquire through the research. I would greatly appreciate any information you could provide about your course related service-learning programs. Given the current local, national, and international crises, it is evident that the Office of Service-Learning plays a valuable role in our society and for the students' college experience.

I will be contacting you over the next couple of days, but if you have any questions in the meantime, feel free to contact me at 504.494.9566 or [cjmaheu1@uno.edu](mailto:cjmaheu1@uno.edu) or my major professor, Dr. Marietta Del Favero at [mdelfave@uno.edu](mailto:mdelfave@uno.edu).

Thank you,

Charlotte Maheu, Doctoral Student  
Higher Education Administration  
University of New Orleans

**Appendix B**  
**Email to Faculty Teaching Service-Learning Based Course (via email)**

Professor/Dr. \_\_\_\_\_,

I am doctoral student in Higher Education Administration at the University of New Orleans, and I am currently conducting research for my dissertation. The focus of my research is undergraduate students' (juniors and seniors preferably) service-learning experience and its relationship to their intellectual development. It is a qualitative study; therefore, I am planning to interview students who have taken a course that included a service-learning component.

After consulting with \_\_\_\_\_, the Director of the Service-Learning Office, I was interested in speaking with you about your course (name course here) and the service-learning component. I would it also be interested in looking at your syllabus to obtain a better understanding of the topics covered and goals and objectives of the course.

I would like to set up a meeting to discuss your course requirements, including the role of the service-learning component, my research, and the way in which my findings may add to your courses. I would greatly appreciate any information you could provide about your service-learning courses. Given the current local, national, and international crises, it is evident that the inclusion of service-learning in academic courses has a significant role in students' academic experience, their perspective on social and community issues, and their involvement as active citizens.

I will be contacting you over the next couple of days, but if you have any questions in the meantime, feel free to contact me at 504.494.9566 or [cjmaheu1@uno.edu](mailto:cjmaheu1@uno.edu) or my major professor, Dr. Marietta Del Favero at [mdelfave@uno.edu](mailto:mdelfave@uno.edu).

Thank you,

Charlotte Maheu, Doctoral Student  
Higher Education Administration  
University of New Orleans

**Appendix C**  
**Introduction Letter to Students (via email)**

Dear Miss Jones,

I would like to invite you to be a participant in a study on college students who have completed a course related service-learning program. The purpose of my research is to explore college students' service-learning experience to obtain an understanding of the relationship between their service-learning experience and student learning. I hope that you will consider the opportunity to share your experiences, opinions, and ideas about service-learning as well as its impact on you as a student. Since I am a doctoral student in Educational Administration (Higher Education), this research is in partial fulfillment of the requirements for my dissertation research at the University of New Orleans.

To obtain a better understanding of college students' service-learning experience, I am scheduling individual interviews lasting 45-60 minutes. It is here where participants can share their stories and their ideas. These discussions will be audio-taped to ensure the accuracy of the information that is collected. The tapes will be kept in a locked office, accessible only to me as the researcher, and destroyed at the conclusion of the study. Individuals who participate may choose their own pseudonym or one will be chosen for them so they will not be identified.

I am not reviewing your raw data. Identities of the individuals who participate are completely confidential. There are no foreseeable risks in participating. You may withdraw from the study at any time without any negative impact on your contact with the University of New Orleans. Some of the benefits include students having a better understanding of their service-learning experience as it relates to their education and intellectual development.

I hope that you will consider participating. I think that you will find it an enjoyable experience and one where you can contribute your ideas so others can learn about college students who participate in service-learning. I will be contacting you in the next couple of days to discuss the study further and see if you are interested in participating. In the meantime, if you have any questions, feel free to contact me at (504) 314-7650 (daytime) or (504) 494-9566 (cell) or [cjmaheu1@uno.edu](mailto:cjmaheu1@uno.edu) or my advisor Dr. Del Favero at [mdelfave@uno.edu](mailto:mdelfave@uno.edu). I look forward to speaking with you.

Sincerely,

Charlotte Maheu, Doctoral Student  
Higher Education Administration  
University of New Orleans

## **Appendix D**

### **Summary Sheet for Potential Participants**

RESEARCH ON SERVICE-LEARNING AND COLLEGE STUDENTS  
Conducted By: Charlotte J. Maheu, Doctoral Student, Educational Administration

1. *What is the purpose of the study?* The purpose of my research is to explore college students' service-learning experience to obtain an understanding of the relationship between their experience and student learning. More specifically, I plan to explore the ways in which students develop intellectually through service-learning.
2. *How may I be chosen?* I am choosing undergraduate students (preferably juniors or seniors) who have participated in a course related service-learning program. Students who participate in this research must be at least 18 years old.
3. *What will be involved?* The discussion may last between 45 and 60 minutes. It will include students' service-learning experience and their perceptions, ideas, and opinions of the way in which they think they have developed academically and/or intellectually. The discussion will also include students' educational experience and the ways in which their service-learning experience correlates to it. The individual discussion will be audio-taped in case I cannot recall some of the details. The tapes will be locked in a private office and destroyed by \_\_\_\_\_.
4. *Who will know what I say?* Only myself as the researcher will have access to the interview data. All interviews are confidential and pseudonyms are given to students who participate (or students who participate may come up with their own pseudonym).
5. *What risks and benefits are associated with participation?* I do not foresee any risks associated with participating in the individual interview. Benefits may include an opportunity to discuss these service-learning activities in detail and see them from a perspective that the students had not thought of before. Through the information students provide, they may better understand how their service-learning experience influences their educational experience or vice versa.
6. *What are my rights as a participant?* You may ask any questions related to the research I am conducting and your questions will be answered fully. You may withdraw from the study at any time. Your participation is voluntary. Withdrawing from the study will not affect any contact you have with the University of New Orleans or your department or college.

**Appendix E**  
**Introductory Sheet**

RESEARCH ON SERVICE/VOLUNTEERISM OF COLLEGE STUDENTS  
Conducted By: Charlotte J. Maheu, Doctoral Student, Educational Administration

If you are interested in participating in this research, please complete the following:

The following information is only for me to get in touch with you regarding times to schedule the individual interview:

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

\_\_\_\_\_

Phone Number \_\_\_\_\_

Cell Phone \_\_\_\_\_

Email Address \_\_\_\_\_

Demographic Information:

Major: \_\_\_\_\_

Classification: \_\_\_\_\_

Age: \_\_\_\_\_

Plans after graduation (if known): \_\_\_\_\_

What course(s) have you enrolled in that included a service-learning component (where service or volunteer work was linked with the course objectives, course topics, class discussions, and/or research papers)? List the course(s) and the semester in which the course took place here:

\_\_\_\_\_

\_\_\_\_\_

What type of service or volunteer work did you complete as part of the course(s)?

\_\_\_\_\_

\_\_\_\_\_

**Appendix F**  
**Consent Form**  
**RESEARCH ON SERVICE-LEARNING AND COLLEGE STUDENTS**  
**Conducted By: Charlotte J. Maheu, Doctoral Student, Educational Administration**

I, \_\_\_\_\_, agree to participate in a research project related to college students who have enrolled in and completed course related service-learning program. This project is organized and carried out by Charlotte Maheu, doctoral student in Educational Administration at the University of New Orleans.

I agree to participate in an individual interview (expecting to last between 45 and 60 minutes). The individual interview will include questions related to the course I enrolled in and the service affiliated with the course. The interview will also include questions about my academic/educational experience as it relates to my ideas about service, my experience with service, and my perceptions of the way in which service relates to intellectual growth or changes.

I agree to have my interview audio-taped to provide the researcher with an accurate account of what I say. I understand that my identity will be protected with a pseudonym of my choosing or the researcher's choosing. I also understand that the tape will be kept in a locked office and destroyed at the end of one year or after the completion of my dissertation (whichever comes first).

I understand that my participation is voluntary and that I may withdraw from the study at any time. Withdrawing from the study will not affect any contact I have with the University of New Orleans.

If I have further questions about the research, I may contact Charlotte Maheu at (504) 314-7650 (daytime) or (504) 494-9566 (cell) or Dr. Marietta Del Favero, Associate Professor, Higher Education Administration at [mdelfave@uno.edu](mailto:mdelfave@uno.edu).

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Participant      Date

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Pseudonym Chosen (First name only – please print)

I have informed the participant of the nature of the research conducted on college students and his/her service-learning experience linked with an academic course. I have answered any questions that the participant has regarding the nature of the study and/or the procedures of the study.

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Charlotte J. Maheu, Researcher      Date

## **Appendix G**

### **Interview Protocol**

1. Tell me about your service-learning experience in \_\_\_\_\_ course.
2. What stood out for you during the service-learning experience?
3. What were some of the key concepts of the course overall?
4. In what ways do you think you were expected to link the theories or concepts in the course to a real situation?

#### Possible Probes:

- Did you find that you made the links yourself or that the professor made the links?
  - Or did you discover the links through a variety of methods/people? If so, in what ways?
  - Were there times when you were unclear about the links between the material covered in class and the service experience?
5. Describe a time during the semester when a procedure or responsibility for the service experience did not go as planned. How did you handle it then? Looking back on that same situation, how would you handle it now?
  6. What did you learn through the service-learning class that you might not have learned without the service-learning activity?
  7. When looking back to the beginning of the semester, how has your thinking/thought processes changed from the beginning of the semester to the end of the semester?
  8. When reflecting upon your service-learning experience, describe the ways in which you believe you developed or grew intellectually.

#### Possible Probes:

- In what ways do you think you developed strengths in critiquing course material? (Critical thinking)
  - How do you think your perspective on \_\_\_\_\_ (type of service work) has changed? (Perspective transformation)
  - How are you able to apply theory to real situations or recognize the way in which real situations are illustrated through theory? (Application of subject matter and experience)
  - How are you open to new ideas or new perspectives (different from your own)? (Openness to new ideas)
  - How have your communication skills (oral and/or written) improved? (Improved communication skills)
9. What is important to you about your college experience? (What do you hope to get out of your college experience?)



**Appendix H  
IRB Approval Form**

***University Committee for the Protection  
of Human Subjects in Research***

University of New Orleans

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*Campus Correspondence*

Principal Investigator: Marietta Del Favero

Co-Investigator: Charlotte Maheu

Date: March 31, 2008

Protocol Title: "Discovering New Selves: Service-Learning and the Intellectual Development of College Students"

IRB#: 03Nov07

The IRB has deemed that the research and procedures are compliant with the University of New Orleans and federal guidelines. The above referenced human subjects protocol has been reviewed and approved using expedited procedures (under 45 CFR 46.116(a) category 7).

Approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation. Use the IRB number listed on this letter in all future correspondence regarding this proposal.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best wishes on your project!

Sincerely,

Robert D. Laird, Ph.D., Chair  
UNO Committee for the Protection of Human Subjects in Research

## VITA

Charlotte Maheu earned a Bachelor of Arts and a Master of Arts in English from the University of New Orleans. After completing these degrees, she began her career in higher education at the University of New Orleans, where she advised and taught incoming students and undergraduate students who were experiencing academic difficulties. Charlotte also worked on the development of the freshman seminar at the University of New Orleans and eventually oversaw the program for incoming students. She worked with multiple departments on campus to develop the seminars and establish learning communities within the program.

Currently, Charlotte is the Assistant Director of the Newcomb College Institute at Tulane University, where she works on long-term projects and programs to enhance academic, leadership, and research opportunities for undergraduate women at Tulane. Her research interests include service-learning, college culture, and the history and changing role of women's education in American colleges and universities.